## SEQUENCE LISTING

<110> Tang, Y. Tom Zhou, Ping Liu, Chenghua Asundi, Vinod Zhang, Jie Ren, Feiyan Chen, Rui-hong Zhao, Qing A. Xue, Aidong J. Yang, Yonghong Wehrman, Tom Wang, Jian-Rui Ma, Yunqing Wang, Dunrui Tillinghast, John Drmanac, Radoje T.

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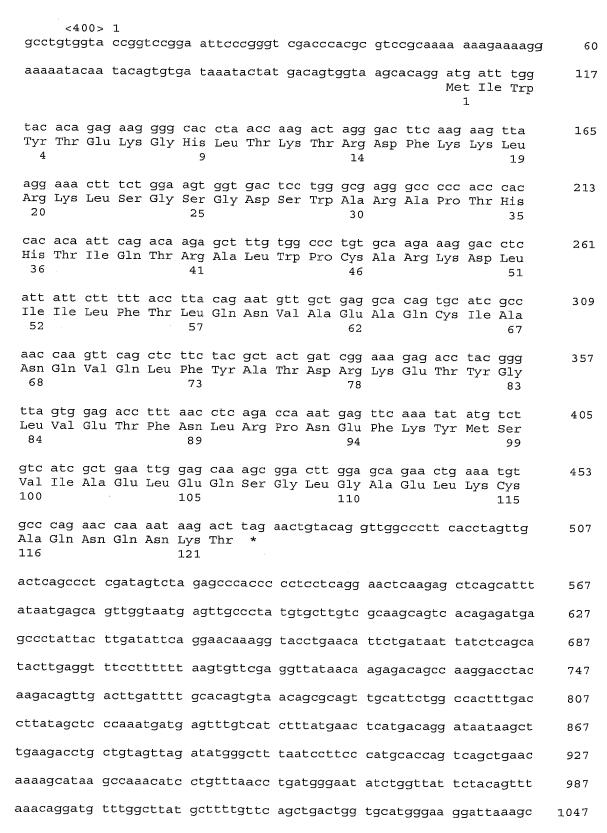
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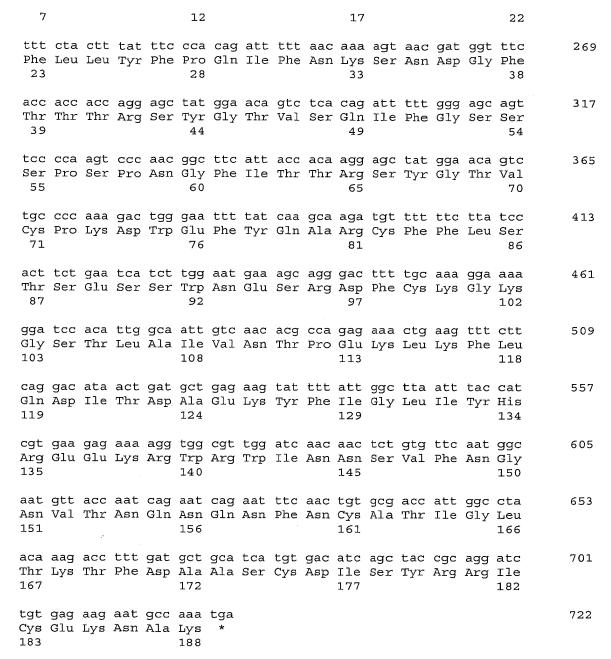


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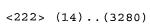
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Home Smill mode throne constitutions			_		Cys	_		_	_	His				aag Lys 1	
		_		_	Ile	_	_		_	Ser	_			ctg Leu 1	
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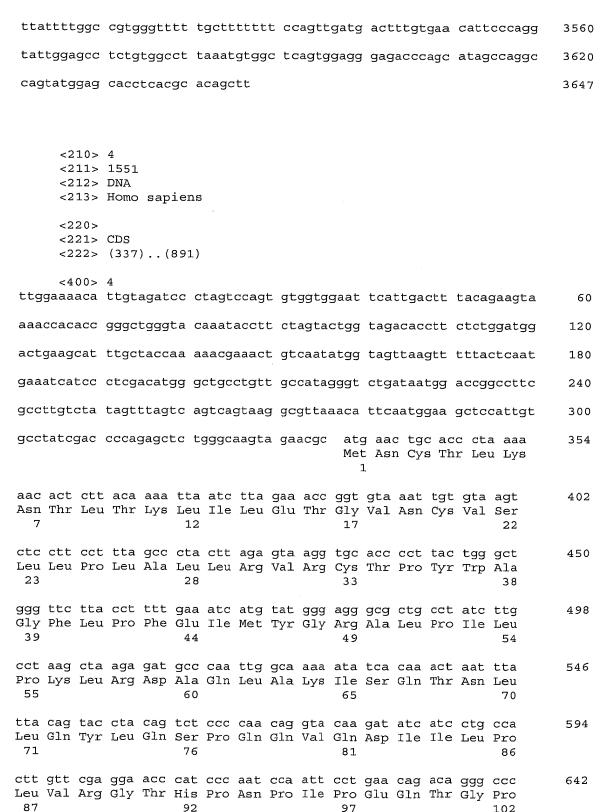
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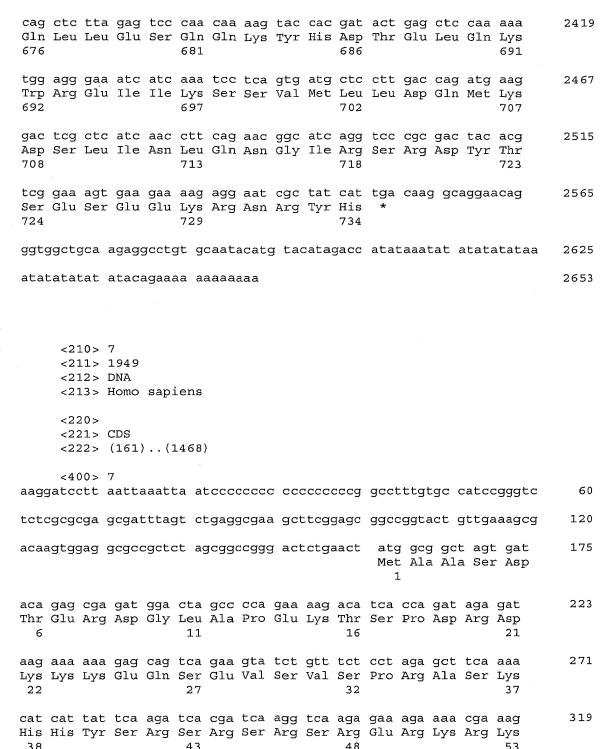


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gag Glu 404	cag Gln	cgg Arg	cgc Arg	ttc Phe	tct Ser 409	gat Asp	atc Ile	atc Ile	ttc Phe	cat His 414	cca Pro	tgg Trp	aaa Lys	aag Lys	gag Glu 419	1603
gag Glu 420	aat Asn	gga Gly	aac Asn	cag Gln	agc Ser 425	cga Arg	gtg Val	att Ile	ctt Leu	tac Tyr 430	acc Thr	atc Ile	acc Thr	ctt Leu	acc Thr 435	1651
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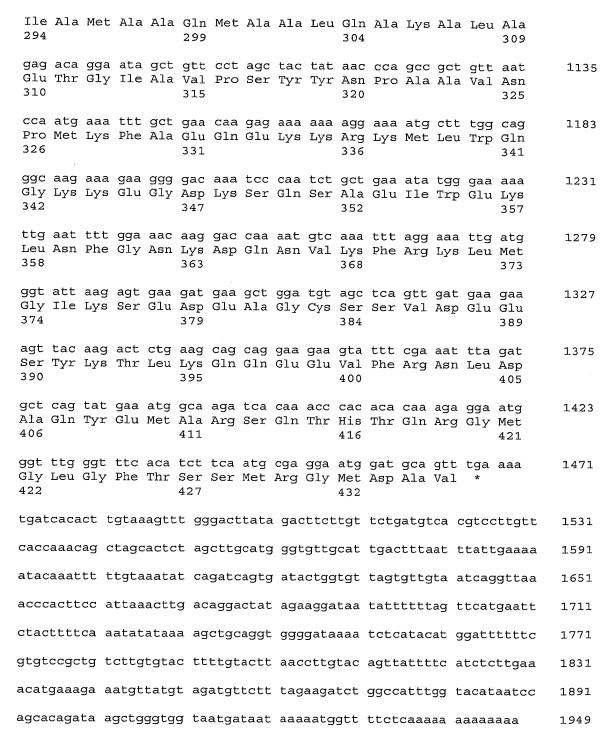
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59

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			aga Arg														703
The stand		_	tca Ser	_						_	_		_				751
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			agt Ser														847
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			aaa Lys														943
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cgc cco Arg Pro															216
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gaa cct Glu Pro 77															408
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ttg gac Leu Asp 109															504
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				att Ile													825
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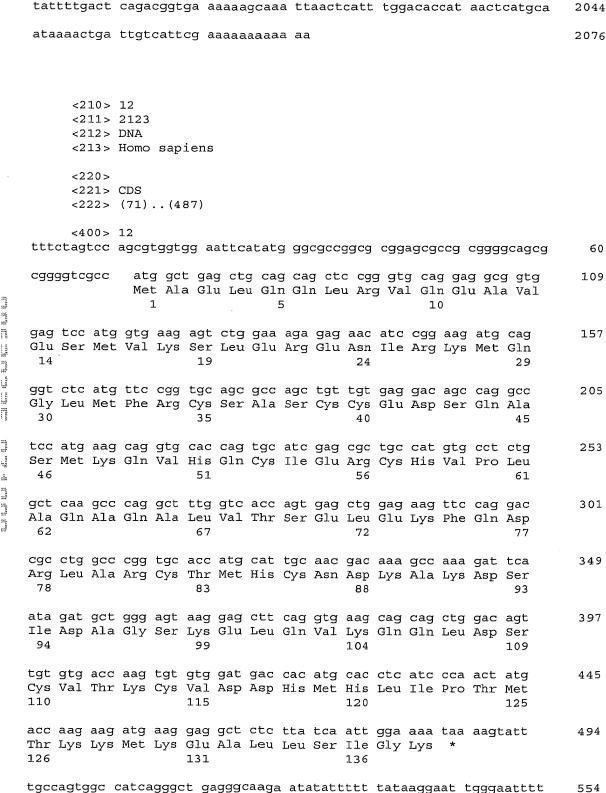
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ctg Leu 321	gtg Val	att Ile	cgt Arg	gly ggg	acc Thr 326	gly aaa	ctt Leu	tat Tyr	gag Glu	ctt Leu 331	tgg Trp	aaa Lys	tca Ser	gga Gly	aga Arg 336	1065
gat Asp 337	aag Lys	agt Ser	tac Tyr	tct Ser	cct Pro 342	agt Ser	gac Asp	ctg Leu	gtt Val	gaa Glu 347	ttg Leu	gtg Val	gct Ala	cgg Arg	atc Ile 352	1113
	gcc Ala															1161

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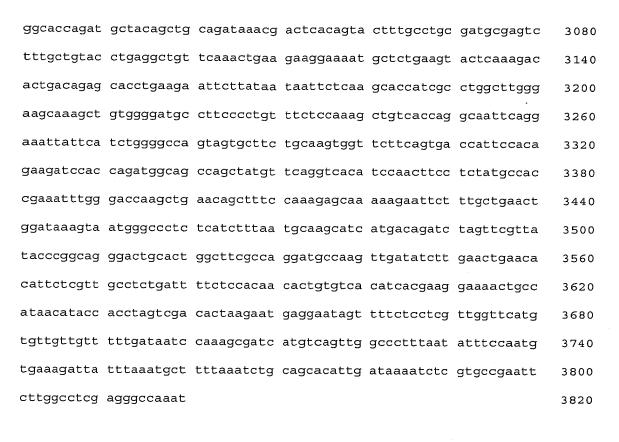
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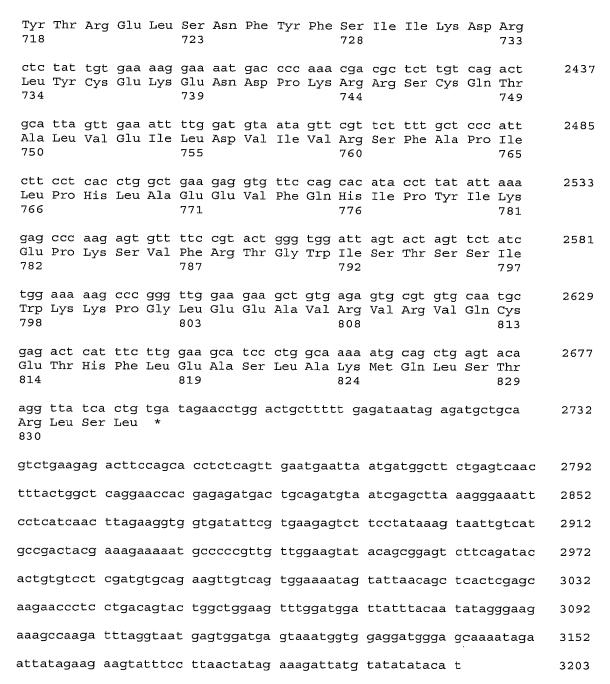
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30				35					40					45	
										Asn				aaa Lys 61	373
-	_		_			_	_			tcc Ser					421
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										gct Ala	_	_		_	517
										gag Glu					565
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	_		_		_	_		_	_	aga Arg					661
										aaa Lys					709
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										cca Pro					901
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				_	_		_	-		gta Val	_			_	997

		_	_					act Thr							_	1045
								cat His								1093
					_			gtg Val		-	_			_		1141
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	-			_		_	_	tgt Cys			_		-		-	1237
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_					_			agc Ser		_		_				1381
				_	Ile	_	_	agc Ser	_	_						1429
					403					408	шр	1110			413	
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Thr 414 att	Asp	Ile gga	Lys	Thr gca	gca Ala 419 ctg	Ala	Lys	gaa	ttg Leu gtt	tta Leu 424 gaa	aaa Lys atg	aag Lys atg	gtg Val gac	Lys agg	ttt Phe 429 cgg	1477 1525
Thr 414 att Ile 430 cca	Asp cct Pro	Ile gga Gly tgg	Lys tca ser	Thr gca Ala ata	gca Ala 419 ctg Leu 435	Ala aat Asn	Lys ggc Gly caa	gaa Glu atg	ttg Leu gtt Val	tta Leu 424 gaa Glu 440 tgg	aaa Lys atg Met	aag Lys atg Met	gtg Val gac Asp	Lys agg Arg	ttt Phe 429 cgg Arg 445	
Thr 414 att Ile 430 cca Pro 446 gtg	Asp cct Pro tat Tyr	gga Gly tgg Trp	tca Ser tgt Cys	Thr gca Ala ata Ile	gca Ala 419 ctg Leu 435 tca Ser 451	Ala aat Asn agg Arg	Lys ggc Gly caa Gln gat	gaa Glu atg Met	ttg Leu gtt Val gtt Val	tta Leu 424 gaa Glu 440 tgg Trp 456 ttg	aaa Lys atg Met ggt Gly	aag Lys atg Met gtt Val	gtg Val gac Asp cca Pro	agg Arg att Ile	ttt Phe 429 cgg Arg 445 cct Pro 461 acc	1525

	Thr					Gln					Glu				gag Glu 509	1717
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	Ile										tat Tyr				ggt Gly 541	1813
	Asp										aaa Lys				999 Gly 557	1861
ggt Gly 558	Trp	ttt Phe	cag Gln	tca Ser	tcc Ser 563	tta Leu	tta Leu	aca Thr	agt Ser	gtg Val 568	gca Ala	gca Ala	agg Arg	aag Lys	aga Arg 573	1909
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ctt Leu 654	agg Arg	aat Asn	aca Thr	ctt Leu	cgc Arg 659	ttt Phe	ctt Leu	ttg Leu	gga Gly	aat Asn 664	gtg Val	gct Ala	gat Asp	ttc Phe	aac Asn 669	2197
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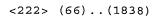
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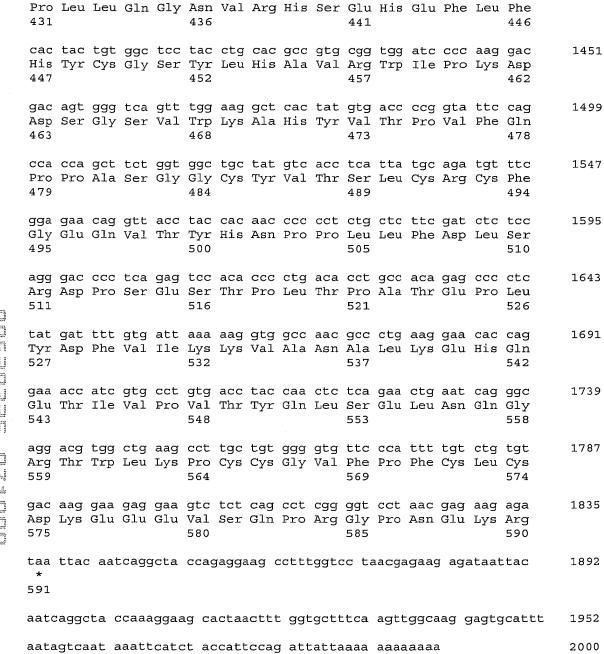
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gca Ala 15					_	cag Gln	_					_	_	_		155
aat Asn 31		_			_	gtt Val		_	_					_		203
tgc Cys 47				_		_		_				_	_		_	251
agg Arg 63																299
agc Ser 79		_					_	_		-				_		347
ggt Gly 95																395
ccc Pro 111																443
aag Lys 127																491
aac Asn 143	_	_	Ser	Arg	_	Asp	Gln	_	His	His	Pro					539
ttt Phe 1																587
Pro 1	_			_		_	_		_			_	_			635
ctc Leu 191	_		_		_			_								683

				tgg Trp											atg Met 222	731
				ttc Phe											acg Thr 238	779
				tgg Trp					_						_	827
				aag Lys												875
				tta Leu												923
				cac His												971
				aag Lys												1019
-		_	_	ggc Gly	_						_	_				1067
				ctt Leu												1115
				gl <sup>à</sup> aaa												1163
				ggc Gly												1211
				tgg Trp												1259
				tta Leu												1307
gga Gly 415																1355
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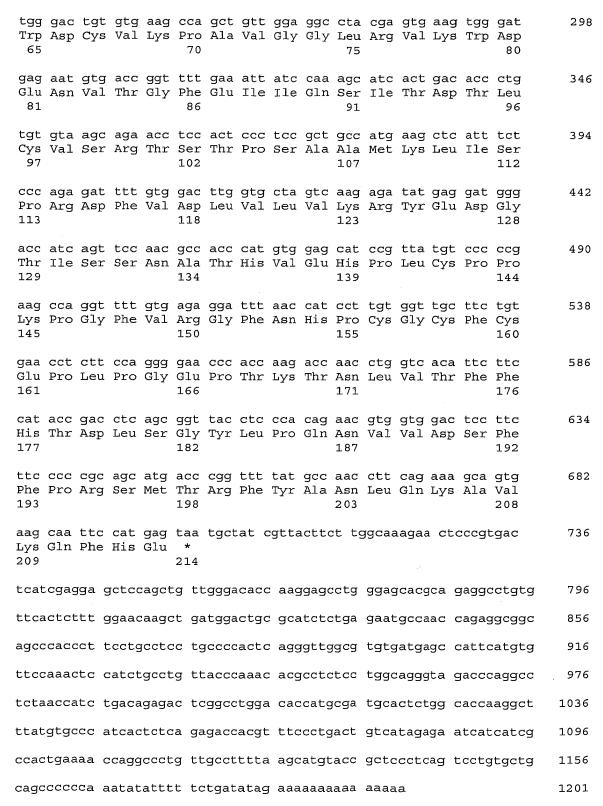
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											cag Gln				14	6
											gag Glu				19	4
											aga Arg				24	2
											aca Thr				29	0
		_	_	_				_			cac His				33	8
die alle die											acg Thr				38	6
											cct Pro				43	4
			_		_				_		gtg Val	_	_		48	2
											aga Arg				53	0
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											cct Pro				62	6
											ttg Leu				67	4

207					212					217					222	
				tta Leu												722
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	_			acc Thr		_	_			_		_	_			818
_	_		_	ttg Leu	_		_			_						866
				caa Gln												914
 _		_		aaa Lys			_			_	_	_		_		962
_		_		aac Asn				_								1010
 	_		_	gat Asp	_	_		_		_	-		_	_		1058
				ttg Leu	_		-			_	_		_			1106
		_		gat Asp		_				_					_	1154
_				ttg Leu				_		-	_					1202
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		_		aga Arg				_	_	_						1298
				gaa Glu		_		_					_		-	1346

	Ser								-	_	ctc Leu	_	_			13	94
											cct Pro					14	42
		_				_	_				agc Ser		_		_	14	90
											aaa Lys					15	38
_			-	_		_	_	_			tca Ser				_	15	86
											cag Gln					163	34
											aag Lys					168	32
_							_		-		cca Pro					173	30
	_			_			_	-		_	aag Lys				-	177	78
	-						_	_			cct Pro		_			182	26
			_		_		_		_	_	tat Tyr			_		187	74
							_				cag Gln			_	_	192	22
											cta Leu					197	70
											cgt Arg					201	. 8

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gaa ccc cag ggc tcc gga cgc cag ggc aat tcc ctg ggt gcc tca gat Glu Pro Gln Gly Ser Gly Arg Gln Gly Asn Ser Leu Gly Ala Ser Asp 687 692 697 702	2114
ggg gtg gac aac acc gtc aga ccg gga gac cag ggc agc tct tca cag Gly Val Asp Asn Thr Val Arg Pro Gly Asp Gln Gly Ser Ser Ser Gln 703 718	2162
ccc aac tca gaa gag aga gag aac acg tct tac agg atg gaa gag Pro Asn Ser Glu Glu Arg Gly Glu Asn Thr Ser Tyr Arg Met Glu Glu 719 724 729 734	2210
aaa agt gat ttc atg cta gaa aaa ttg gaa act aaa agt gtg tag cta Lys Ser Asp Phe Met Leu Glu Lys Leu Glu Thr Lys Ser Val * 735 740 745	2258
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atg ctc cag tac cgg cgg gac aca gca ggc tgg aag att tgc cgg gaa Met Leu Gln Tyr Arg Arg Asp Thr Ala Gly Trp Lys Ile Cys Arg Glu 17 22 27 32	154
ggc aat gga gtt tca gtt tcc tgg agg cca tct gtg gag ttt cca ggg Gly Asn Gly Val Ser Val Ser Trp Arg Pro Ser Val Glu Phe Pro Gly 33 48	202
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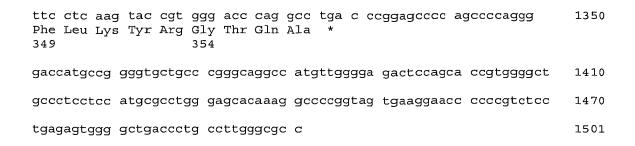
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ccgaacatcg tgaagttgca caagtactgg ctggatacct ctg	gaggcctg cgcgagggtc 180
atcttcatca cagagtacgt gtcatcaggc agcctcaagc aa	ttcctcaa aaagaccaag 240
aagaaccaca aggcc atg aac gcc cgg gcc tgg aag cg Met Asn Ala Arg Ala Trp Lys An 1 5	
atc ctg tct gcg ctc agc ttc ctg cac gcc tgc acc Ile Leu Ser Ala Leu Ser Phe Leu His Ala Cys Th 13 23	
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atc aag atc ggc tcc gtg tgg cac cga atc ttc tcc Ile Lys Ile Gly Ser Val Trp His Arg Ile Phe Ser 45 50 55	_
gat gat ctc cga agc ccc atc cgc gct gag cga gag Asp Asp Leu Arg Ser Pro Ile Arg Ala Glu Arg Glu 61 66 71	
ctg cac ttc ttc ccc cca gag tat gga gag gtg gcc Leu His Phe Phe Pro Pro Glu Tyr Gly Glu Val Ala 77 82 87	
gtg gac atc ttc tcc ttt ggg atg tgt gcg ctg gag Val Asp Ile Phe Ser Phe Gly Met Cys Ala Leu Glu 93 98 103	
gaa atc cag acc aat ggg gac acc cgg gtc aca gag Glu Ile Gln Thr Asn Gly Asp Thr Arg Val Thr Glu 109 114 119	

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	ttc Phe															771
_	cac His	_			_		_			-						819
	gag Glu	_		_	_	_	_	_			_	_				867
	cgg Arg		_			_		_				_	_	_		915
	atg Met															963
	ctg Leu															1011
	gcc Ala															1059
	ccc Pro															1107
_	gag Glu	_	_		_			-					_		-	1155
	ctg Leu															1203
	gac Asp															1251
	cac His			_			_	_	_	_		_		_		1299

32

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qcc qtg aag qtq atc cag agt ttg ccg aag aat ggt tca ttc cag cca

Ala Val Lys Val Ile Gln Ser Leu Pro Lys Asn Gly Ser Phe Gln Pro

aca aat gaa atg atg ctt aaa ttt tat agc ttc tat aag cag gca act

53

47

63

550

598

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1364	## ##
Harries .	
No.4	T,

	Thr 64		Glu	Met	Met	Leu 69		Phe	Tyr	Ser	Phe 74		Lys	Gln	Ala	Thr 79	
	gaa Glu 80	gga Gly	ccc Pro	tgt Cys	aaa Lys	ctt Leu 85	Ser	agg Arg	cct Pro	gga Gly	ttt Phe 90	Trp	gat Asp	cct Pro	att Ile	gga Gly 95	646
							Trp					Asp				gag Glu 111	694
	gaa Glu 112	gcc Ala	atg Met	att Ile	gca Ala	tat Tyr 117	gtt Val	gaa Glu	gaa Glu	atg Met	aaa Lys 122	aag Lys	att Ile	att Ile	gaa Glu	act Thr 127	742
	atg Met 128	cca Pro	atg Met	act Thr	gag Glu	aaa Lys 133	gtt Val	gaa Glu	gaa Glu	ttg Leu	ctg Leu 138	cgt Arg	gtc Val	ata Ile	ggt Gly	cca Pro 143	790
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	ccc Pro 160	tca Ser	gtc Val	cga Arg	ctg Leu	gag Glu 165	aaa Lys	atc Ile	tct Ser	aaa Lys	tgt Cys 170	tta Leu	gaa Glu	gat Asp	ctt Leu	ggt Gly 175	886
THE THE HAND	aat Asn 176	gtt Val	ctc Leu	act Thr	tct Ser	act Thr 181	ccg Pro	aac Asn	gcc Ala	aaa Lys	acc Thr 186	gtt Val	aat Asn	ggt Gly	aaa Lys	gct Ala 191	934
	gaa Glu 192	agc Ser	agt Ser	gac Asp	agt Ser	gga Gly 197	gcc Ala	gag Glu	tct Ser	gag Glu	gaa Glu 202	gaa Glu	gag Glu	gcc Ala	caa Gln	gaa Glu 207	982
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		Ser	Ala		His	Lys	aat Asn										1078
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tcgcc atg gat cgg atg aag atc aaa cgg cag ctg tca atg aca Met Asp Arg Met Lys Lys Ile Lys Arg Gln Leu Ser Met Thr 1 5 10	227
ctc cga ggt ggc cga ggc ata gac aag acc aat ggt gcc cct gag cag Leu Arg Gly Gly Arg Gly Ile Asp Lys Thr Asn Gly Ala Pro Glu Gln 15 20 25 30	275
ata ggc ctg gat gag agt ggt ggt ggc ggc agt gac cct gga gag Ile Gly Leu Asp Glu Ser Gly Gly Gly Gly Ser Asp Pro Gly Glu 31 36 41 46	323
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	ctc Leu 63	Ser	tct Ser	gca Ala	. cca . Pro	gag Glu 68	att Ile	gtg Val	cac His	gag Glu	gac Asp 73	Leu	aag Lys	atg Met	ggg Gly	tct Ser 78	419	<b>)</b>
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	act Thr 111	gag Glu	gac Asp	atc Ile	aac Asn	aag Lys 116	cgc Arg	cta Leu	tca Ser	cta Leu	cca Pro 121	gct Ala	gac Asp	atc Ile	cgg Arg	ctg Leu 126	563	
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Hard Barn Barn						cgc Arg 148										ggc Gly 158	659	
Arrest Arrib Arrest	ttt Phe 159	Gly 999	aaa Lys	ctg Leu	gag Glu	acc Thr 164	tac Tyr	att Ile	aag Lys	ctg Leu	gac Asp 169	aaa Lys	ctg Leu	ggc Gly	gag Glu	ggt Gly 174	707	
the mail the gray	acc Thr 175	tat Tyr	gcc Ala	acc Thr	gtc Val	tac Tyr 180	aaa Lys	ggc Gly	aaa Lys	agc Ser	aag Lys 185	ctc Leu	aca Thr	gac Asp	aac Asn	ctt Leu 190	755	
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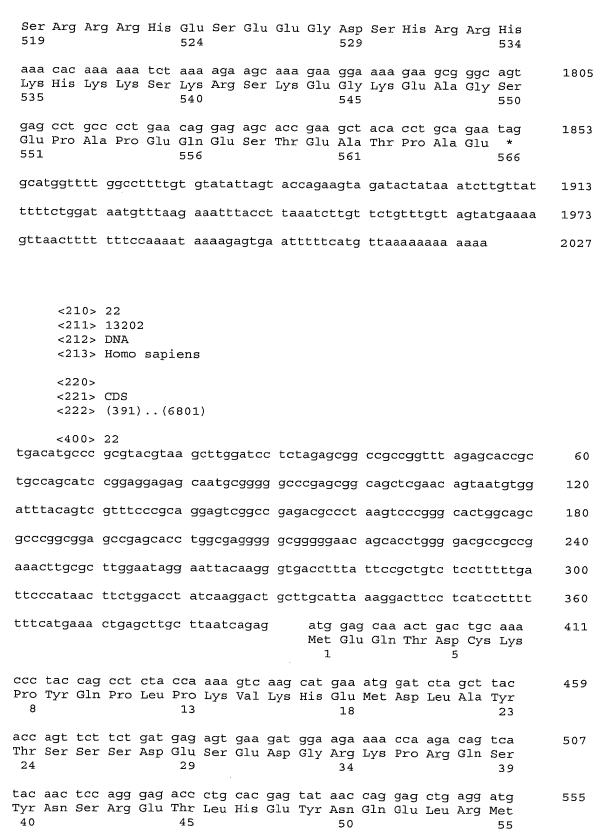
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		Ser	-	_	_	_	_	_	_	 _	_		gga Gly 86	413
				_		_	cca Pro	_		 _		_		461
							aca Thr						ggg Gly 118	509
							gac Asp							557
							gat Asp							605
And the con-	_				-	_	ctt Leu		_					653
de the T							tac Tyr							701
Contact of the			_	_			gta Val					-	_	749
The first of the f							aac Asn							797
							tct Ser							845
	_	_	_	_	_	-	act Thr	_		 	 _	 _		893
							agc Ser							941
							cta Leu							989
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											Arg				gaa Glu 310	1085
	Asp														gct Ala 326	1133
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											ttt Phe					1373
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					ggc Gly 605		_		_		_	_		_		2235
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					cac His 669											2427
					tgg Trp 685											2475
					agc Ser 701											2523
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ggg aca ggc tgc aa Gly Thr Gly Cys As 792		-	
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act cat gtc att co Thr His Val Ile Pr 872			
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	1192		ьеи	. Pne		1197		Ala	Leu	. Ата	1202	_	Pro	Asp	GLY	Ser 1207	
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Harry House Hunter Stands	atc Ile 1336	aca Thr	act Thr	gta Val	Ile	ggc Gly 341	tca Ser	aat Asn	ggt Gly	Leu	act Thr 1346	tcc Ser	aca Thr	caa Gln	Pro	ctg Leu l351	4443
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gtc agc aag gta gca att cac tcc act cta gag tca gcg agg gcc atc

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THE REPORT	gac Asp 1656	Pro	gag Glu	gga Gly	cac His	ctg Leu 1661	acc Thr	aat Asn	gca Ala	acg Thr	ttt Phe 1666	Pro	act Thr	gga Gly	gag Glu	gtc Val 1671	5403
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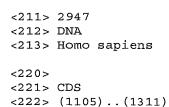
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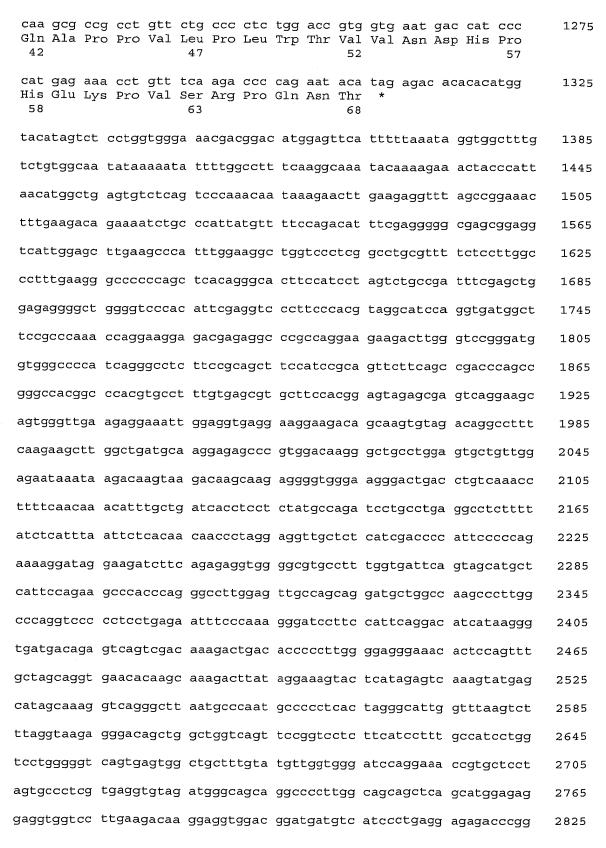


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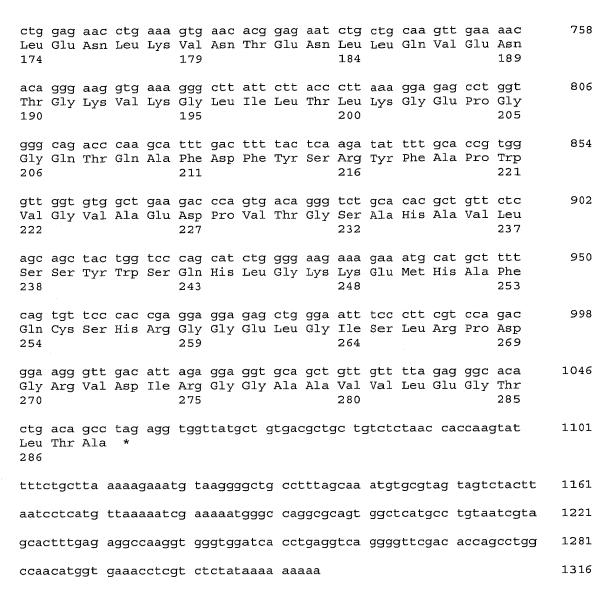
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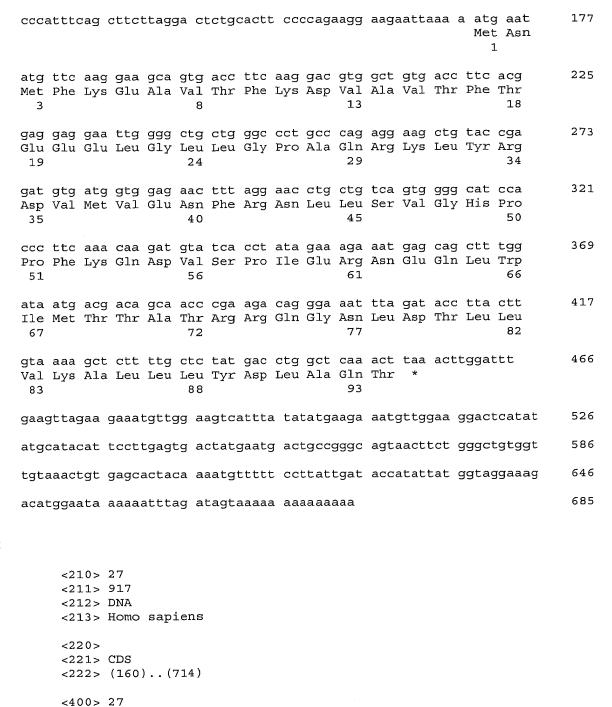
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120

174

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ccagcagctg ctgttgccac caccactagt tcaagcacc

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											caa Gln 48						318
											gtt Val 64						366
											ctt Leu 80						414
											ctt Leu 96						462
tense Anné Cours, Brest											aat Asn 112						510
, was grant											ctg Leu 128						558
kut in Kan Ka											cag Gln 144						606
See											gac Asp 160						654
											gag Glu 176						702
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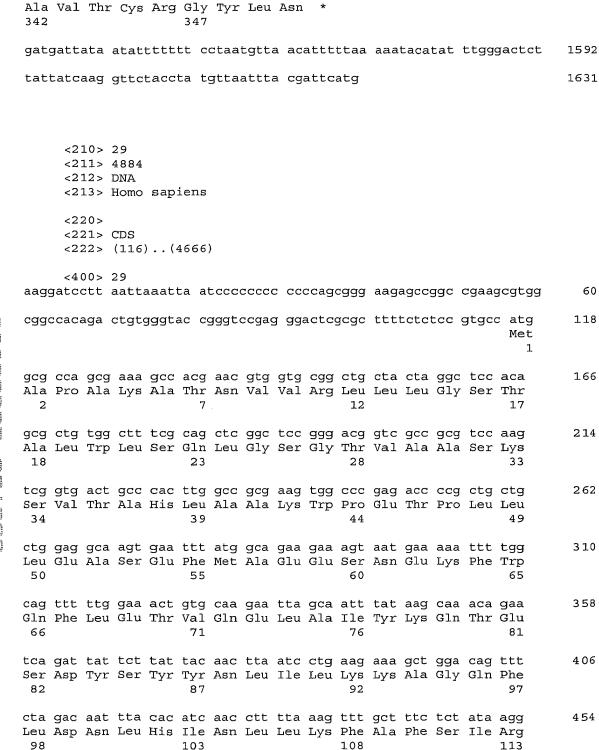
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112

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502

gca tac tcc cca gct att cag atg ttt cag cag att gca gct gat gag

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															tca Ser 161	598
	act Thr															646
	gag Glu															694
	ttt Phe	-	-				_	_		_		-			-	742
_	att Ile	_		_		_				_			_			790
	atg Met										_		_	_		838
	tac Tyr															886
	gta Val		_			_			_	_						934
	aaa Lys			_				_		_	_		_		_	982
	caa Gln															1030
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	gct Ala		_		_	_				-		_				1126
	ttc Phe							cta Leu								1174

		Met										Asp				aga Arg 369	1222
		Lys	att Ile														1270
			atg Met														1318
			gga Gly														1366
			atg Met														1414
options of the second of the s			gta Val		_		_					_				_	1462
			aat Asn														1510
and the day			aag Lys														1558
He dim that			aat Asn														1606
Har Seas Carl			ata Ile														1654
			ggt Gly														1702
			gat Asp														1750
			ttt Phe														1798
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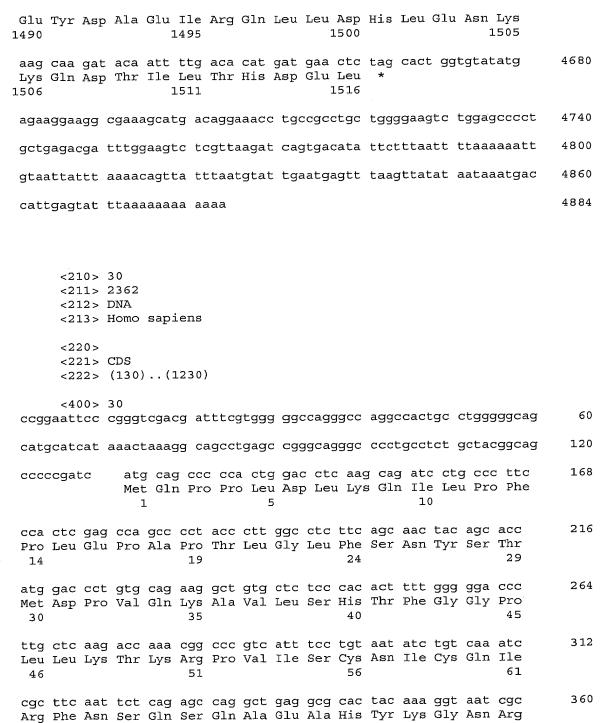
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The State State State and													gat att Asp Ile 1153	3574
gram mage 180 mmg gram mmg Hann													cta gaa Leu Glu 1169	3622
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they stand	aaa Lys 1186	gtg Val	aaa Lys	aaa Lys	gaa aca Glu Thr 1191	gac Asp	aaa Lys	att Ile	aag gaa Lys Glu 1196	gat Asp	atc Ile	ctt Leu	acc gat Thr Asp 1201	3718
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Half How man field	_	_	_		Glu	_	_			Arg					gga t Gly T 13		4246
Ann and Ann		_			Leu		-			Tyr			_	_	tta t Leu T 13		4294
of the state of th					Lys					Ile					agg c Arg L 14		4342
Hart British British		_	_		Gln	_		_		Āsp			_		tca a Ser A 14		4390
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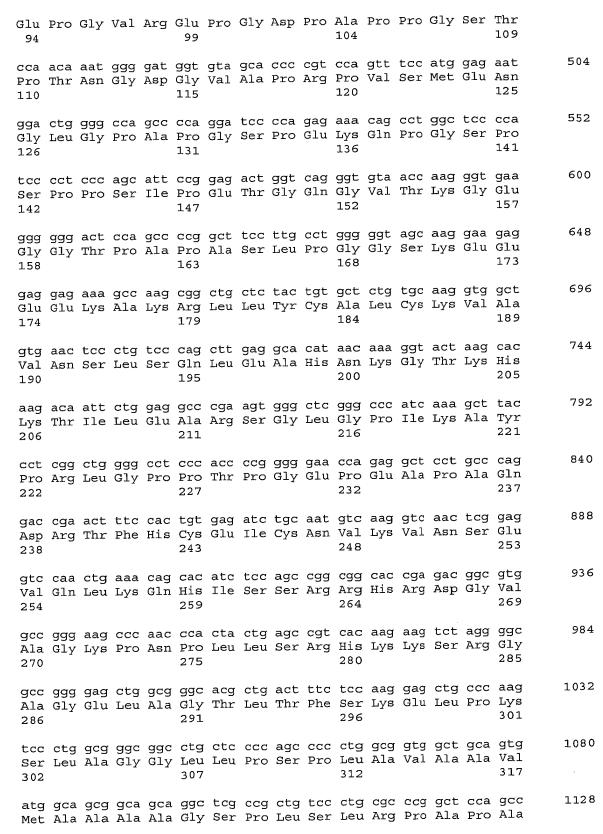


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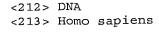
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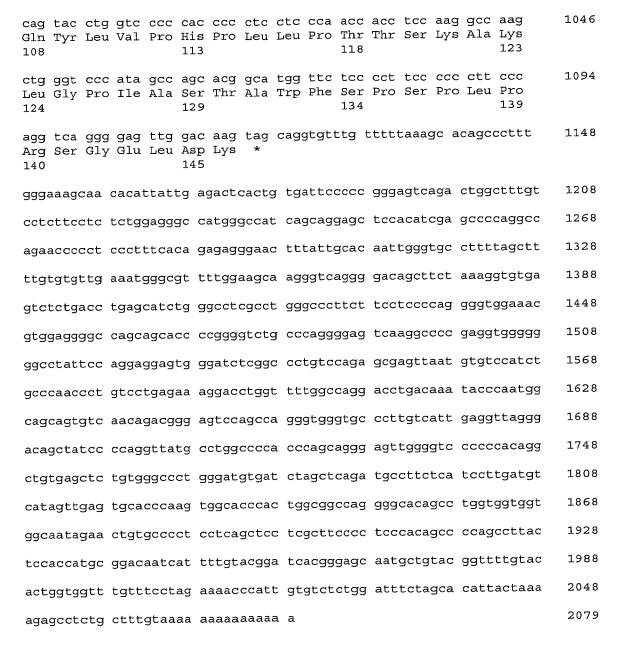
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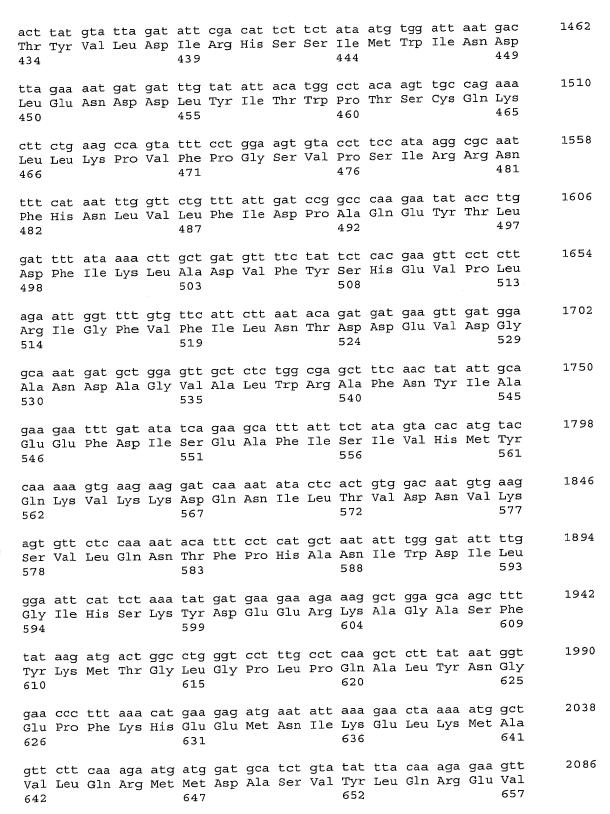


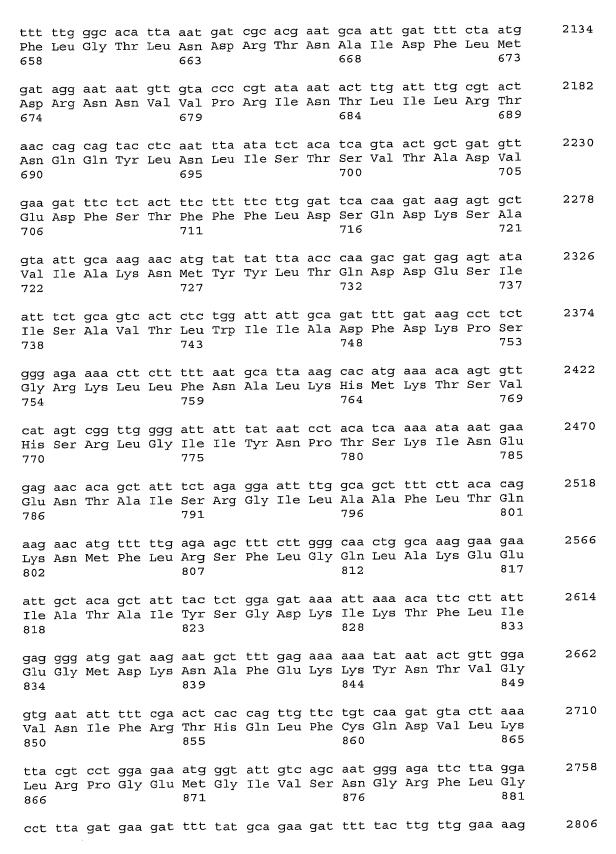
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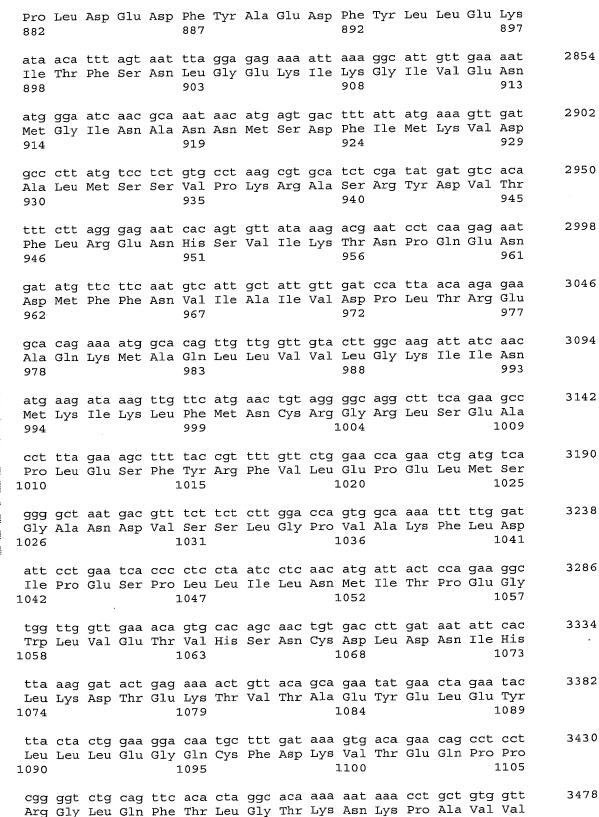
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	gaa Glu 242	tac Tyr	aaa Lys	gca Ala	ctg Leu	gat Asp 247	gat Asp	acc Thr	caa Gln	gtt Val	aaa Lys 252	act Thr	gtg Val	act Thr	aat Asn	act Thr 257	886
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	999 Gly 274	aaa Lys	cta Leu	aaa Lys	gaa Glu	ata Ile 279	tat Tyr	tca Ser	gat Asp	ctt Leu	aga Arg 284	gat Asp	aat Asn	ctg Leu	aca Thr	gca Ala 289	982
the first first	ttc Phe 290	caa Gln	aaa Lys	tac Tyr	ctg Leu	att Ile 295	gag Glu	agt Ser	aac Asn	aaa Lys	caa Gln 300	atg Met	atg Met	cct Pro	ttg Leu	aaa Lys 305	1030
June June Stuff Some	gtc Val 306	tgg Trp	gaa Glu	cta Leu	caa Gln	gat Asp 311	ctt Leu	agt Ser	ttt Phe	caa Gln	gca Ala 316	gct Ala	tct Ser	caa Gln	ata Ile	atg Met 321	1078
Mante Mante	tcc Ser 322	gct Ala	cca Pro	gtt Val	tat Tyr	gat Asp 327	gcc Ala	att Ile	aaa Lys	tta Leu	atg Met 332	aaa Lys	gac Asp	att Ile	tca Ser	cag Gln 337	1126
The State of the S	aac Asn 338	ttc Phe	ccc Pro	ata Ile	aaa Lys	gcc Ala 343	aga Arg	tct Ser	cta Leu	acc Thr	aga Arg 348	att Ile	gct Ala	gta Val	aat Asn	caa Gln 353	1174
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	tta Leu 402	gaa Glu	gga Gly	aaa Lys	atg Met	atg Met 407	aat Asn	ggc Gly	ctt Leu	cgc Arg	aat Asn 412	ctt Leu	GJÀ aaa	atc Ile	aat Asn	ggg Gly 417	1366
	gaa Glu 418	gat Asp	atg Met	agc Ser	aaa Lys	ttt Phe 423	tta Leu	aaa Lys	tta Leu	aat Asn	tca Ser 428	cac His	att Ile	tgg Trp	gaa Glu	tat Tyr 433	1414



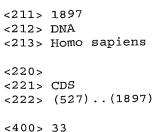




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	tat Tyr 1154	caa Gln	ata Ile	gtt Val	Gly	cat His L159	gaa Glu	gga Gly	act Thr	Asp	tct Ser 1164	caa Gln	gca Ala	gac Asp	cta Leu 1	gaa Glu 169	3622
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the feet that	gaa Glu 1202	gat Asp	gaa Glu	aaa Lys	Thr	aaa Lys 1207	gga Gly	ctg Leu	tgg Trp	Asp	tcc Ser 1212	att Ile	aaa Lys	agt Ser	ttc Phe	aca Thr 1217	3766
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Hall And	ttt Phe 1234	tca Ser	gtt Val	gct Ala	Ser	ggt Gly 1239	cat His	tta Leu	tat Tyr	Glu	cgt Arg 1244	ttt Phe	tta Leu	aga Arg	att Ile	atg Met 1249	3862
H. W. W. W. C. A. C.	atg Met 1250	ctt Leu	tct Ser	gtt Val	Leu	cgt Arg 1255	aac Asn	acc Thr	aaa Lys	Thr	cca Pro 1260	gtg Val	aaa Lys	ttc Phe	tgg Trp	ttg Leu 1265	3910
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	agg Arg 1410	agc Ser	cag Gln	tat Tyr	caa g Gln <i>I</i>	gct Ala 415	ctc Leu	agt Ser	caa Gln	Asp	cca Pro 1420	aac Asn	agt Ser	ctt Leu	Ser	aac Asn 1425	4390
	cta Leu 1426	gat Asp	cag Gln	gat Asp	ctc o Leu I	ccc Pro 431	aat Asn	aat Asn	atg Met	Ile	tac Tyr 1436	caa Gln	gtc Val	gcc Ala	Ile	aag Lys 1441	4438
See this way see	tct Ser 1442	ctt Leu	cct Pro	caa Gln	gac t Asp 1	tgg Trp 447	ctg Leu	tgg Trp	tgt Cys	Glu	acc Thr 1452	tgg Trp	tgt Cys	gat Asp	Asp	gaa Glu 1457	4486
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And the Straight	aaa Lys 1474	gaa Glu	tcc Ser	aaa Lys	cta a Leu l	aaa Lys 479	gct Ala	gct Ala	gcc Ala	Arg	att Ile 1484	gtc Val	cca Pro	gaa Glu	Trp	gtg Val 1489	4582
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Had Han and Had	aca Thr 212	gag Glu	atc Ile	cac His	cga Arg	gtg Val 217	gag Glu	cct Pro	gag Glu	gac Asp	gtt Val 222	gcc Ala	aac Asn	cac His	cta Leu	act Thr 227	1207
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	aag Lys 292	Phe	atc : Ile	aag Lys	ato Ile	gcg Ala 297	ı Ala	cto Leu	: tgc ı Cys	aag Lys	cag Gln 302	ı Asr	caç Glr	gac Asp	cto Lev	ctg Leu 307	1447
	tct Ser 308	Phe	tac Tyr	gcc Ala	gtg Val	g gto L Val	L Met	: Gl <sup>y</sup>	g ct <u>c</u> / Lev	g gac ı Asp	aac Asr 318	ı Ala	gct a Ala	gto Val	ago L Ser	cgc Arg 323	1495
	ctt Leu 324	ı Arç	a cto g Lev	aco Thr	tgg Tr	g gag o Glu 329	д Гуя	g cto s Lei	g cca l Pro	a ggg o Gly	g aaa / Lys 334	Pne	aaq Lys	g aad S Asi	tto n Lei	ttt Phe 339	1543
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Arg Lys Phe Glu Asn Leu Thr Asp Pro Cys Arg Asn His Lys Ser Tyr	
cga gaa gtg atc tcc aaa atg aag ccc cct gtg att ccc ttc gtg cct Arg Glu Val Ile Ser Lys Met Lys Pro Pro Val Ile Pro Phe Val Pro 356 361 366 371	1639
ctg atc ctc aaa gac ctg act ttc ctg cac gaa ggg agt aag acc ctt Leu Ile Leu Lys Asp Leu Thr Phe Leu His Glu Gly Ser Lys Thr Leu 372 387 382	1687
gta gat ggt ttg gtg aac atc gag aag ctg cat tca gtg gcc gaa aaa Val Asp Gly Leu Val Asn Ile Glu Lys Leu His Ser Val Ala Glu Lys 388 393 398 403	1735
gtg agg aca atc cgc aaa tac cgg agc cgg ccc ctt tgc ctg gac atg Val Arg Thr Ile Arg Lys Tyr Arg Ser Arg Pro Leu Cys Leu Asp Met 404 409 414 419	1783
gag gca tcc ccc aat cac ctg cag acc aag gcc tat gtg cgc cag ttt Glu Ala Ser Pro Asn His Leu Gln Thr Lys Ala Tyr Val Arg Gln Phe 420 425 430 435	1831
cag gtc atc gac aac cag aac ctc ctc ttc gag ctc tcc tac aag ctg Gln Val Ile Asp Asn Gln Asn Leu Leu Phe Glu Leu Ser Tyr Lys Leu 436 441 446 451	1879
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agc tgc a Ser Cys T 28	ct gaa c hr Glu L	tg cag g eu Gln G 33	aa ctg lu Leu :	aag cag Lys Gln	ctg gcg Leu Ala 38	g cgc cag a Arg Gln	ggc tac Gly Tyr 43	328
tgg gcc c Trp Ala G 44	aa agc ca ln Ser Hi	ac gcc c is Ala Le 49	eu Arg (	gga aag Gly Lys	gtg tad Val Tyr 54	c cag cgc c Gln Arg	ctg atc Leu Ile 59	376
cgg gac at Arg Asp II 60	t ccc to le Pro Cy	gc cgc ac 's Arg Th 65	g gtc a ir Val 1	acg cct Thr Pro	gac gcc Asp Ala 70	c agc gtg Ser Val	tac agc Tyr Ser 75	424
gac atc gt Asp Ile Va 76	g ggc aa il Gly Ly	g atc gt s Ile Va 81	g ggc a l Gly I	aag cac Lys His	agc agc Ser Ser 86	agc tgc Ser Cys	ctg ccg Leu Pro 91	472
ctg ccc ga Leu Pro Gl 92	g ttc gt u Phe Va	g gac aa l Asp As 97	c acg c n Thr G	ag gtg 31n Val	ccc agc Pro Ser 102	tac tgc Tyr Cys	ctg aat Leu Asn 107	520
gca cgc gg Ala Arg Gl 108	y Giu Gi	y Ala Va 113	i Arg L	ys Ile	Leu Leu 118	Cys Leu 1	Ala Asn 123	568
cag ttc cc Gln Phe Pro 124	o Asp II	ser Pho	e Cys P	ro Ala	Leu Pro 134	Ala Val V	/al Ala 139	616
ctg ctg ctg Leu Leu Leu 140	inis lyl	145	e Asp G.	iu Ala	Glu Cys 150	Phe Glu I	ys Ala 155	664
tgc cgc ato Cys Arg Ile 156	Deu Ala	161	Asp Pi	ro Gly :	Arg Arg 166	Leu Ile A	sp Gln 171	712
agc ttc ctc Ser Phe Leu 172	AIA PHE	177	ser Cy	s Met :	Thr Phe 182	Gly Asp L	eu Val 187	760
aac aag tac Asn Lys Tyr 188	cys GIII	193	ніѕ цу	s Leu N	Met Val . .98	Ala Val S	er Glu 203	808
gat gtc ctg Asp Val Leu 204	OIII VAI	209	Asp II	p Gin A	rg Trp 1 14	Leu Phe G	ly Glu 219	856
ctg ccc ctc Leu Pro Leu	tgc tac Cys Tyr	ttc gcc Phe Ala	cgg gto Arg Va	c ttt g l Phe A	ac gtc t sp Val I	tc ctg gt he Leu Va	g gag al Glu	904

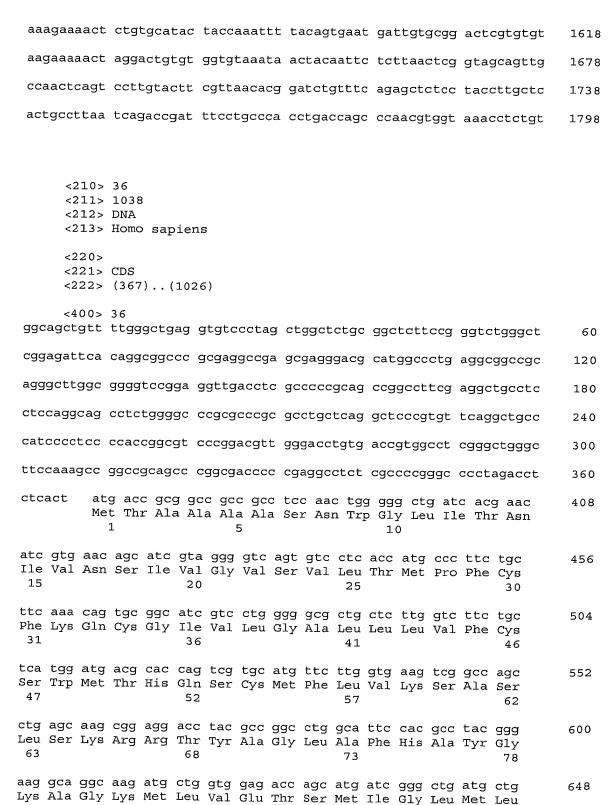
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236	241	246	251
cat aag gtg agg gc	c ggg cag ccg ct	g gag tcg gac agc gtg	aag cag 1000
His Lys Val Arg Al	a Gly Gln Pro Le	u Glu Ser Asp Ser Val	Lys Gln
252	257	262	267
gac atc cgc acg tt	c gtc aga gac at	c gcg aag acg gtg tcc	cct gag 1048
Asp Ile Arg Thr Ph	e Val Arg Asp Il	e Ala Lys Thr Val Ser	Pro Glu
268	273	278	283
aag ctg ctg gag aa:	a gcg ttc gcc at	c cgc ctc ttg tcc cgc	aag gag 1096
Lys Leu Leu Glu Ly:	s Ala Phe Ala Il	e Arg Leu Leu Ser Arg	Lys Glu
284	289	294	299
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Ile Gln Leu Leu Glr	n Met Ala Asn Gli	1 Lys Ala Leu Lys Gln	Lys Gly
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Ile Thr Val Lys Glr	n Lys Ser Val Ser	Leu Ser Lys Arg Gln	Phe Val
316	321	326	331
cac ttg gcc gtc cat	gca gag aac tto	e cgc tcg gag atc gtc	agc gtg 1240
His Leu Ala Val His	Ala Glu Asn Phe	Arg Ser Glu Ile Val	Ser Val
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Arg Glu Met Arg Asp	Ile Trp Ser Trp	Val Pro Glu Arg Phe 3	Ala Leu
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Cys Gln Pro Leu Leu	Leu Phe Ser Ser	Leu Gln His Gly Tyr S	Ger Leu
364	369	374	379
gcc agg ttc tac ttc	cag tgt gaa gga	cat gag cct acc ctc t	etg ctc 1384
Ala Arg Phe Tyr Phe	Gln Cys Glu Gly	His Glu Pro Thr Leu I	Leu Leu
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396	401	406	411
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Trp Ser Glu Arg Asn	Lys Phe Gly Gly	Lys Leu Gly Phe Phe G	ly Thr
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Gly Glu Cys Phe Val	Phe Arg Leu Gln	Pro Glu Val Gln Arg T	yr Glu
428	433	438	443
irp var var ite Lys	cac ccc gag ctg	acc aag ccc cca ccc t	tg atg 1576
	His Pro Glu Leu	Thr Lys Pro Pro Pro Lo	eu Met
	449	454	459

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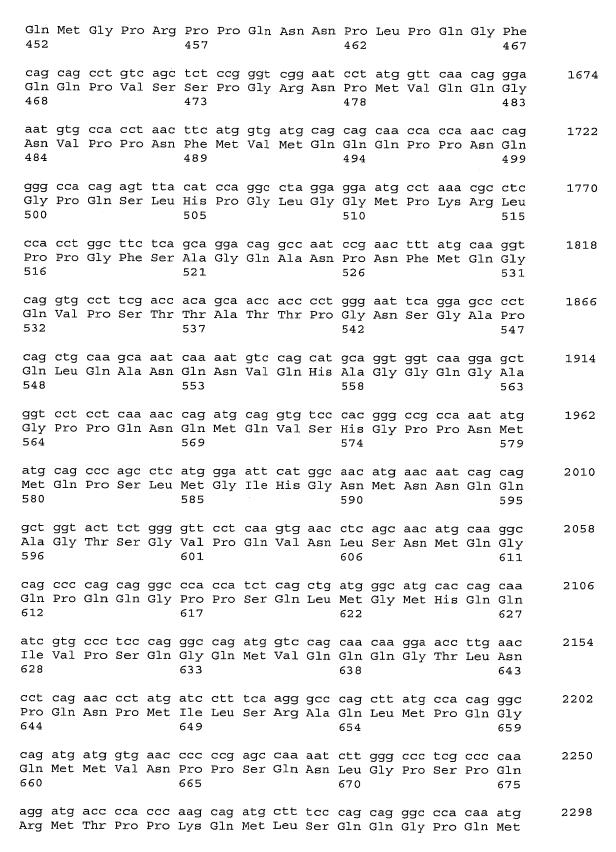
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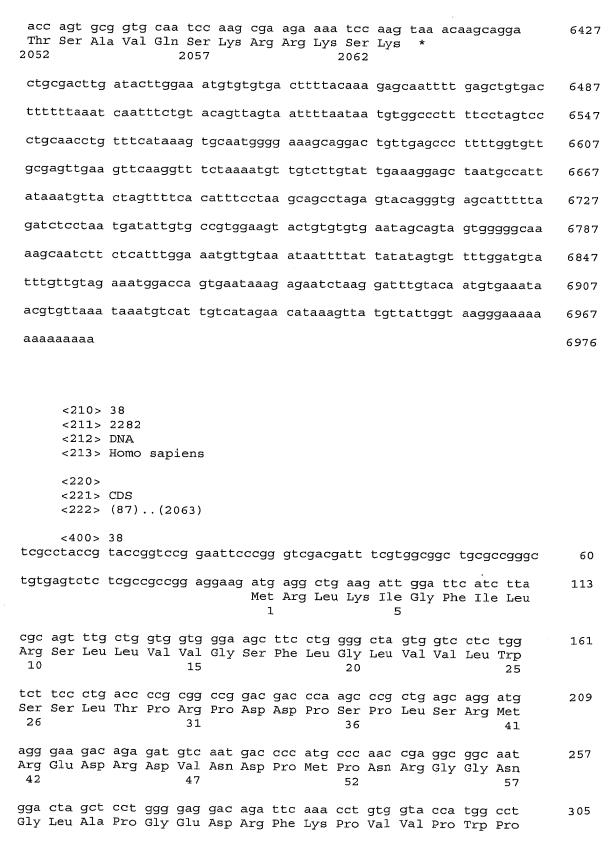
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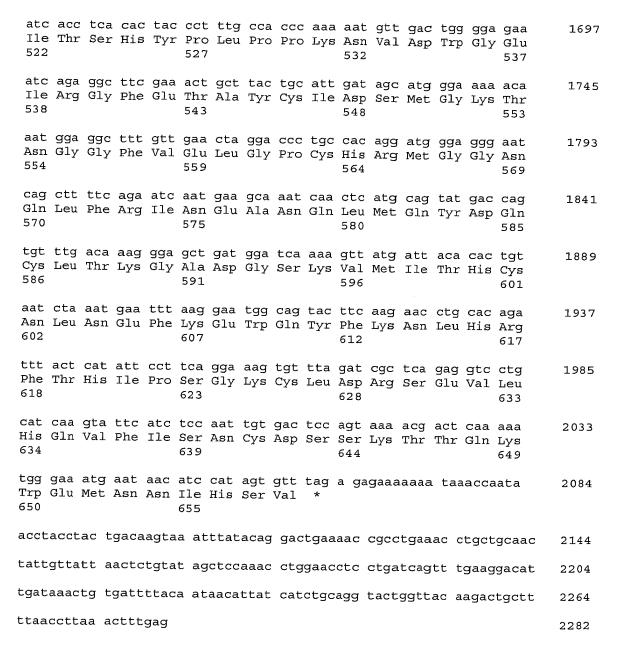
Feel and the feel and the second term and the total of the second terms and the second of the second terms.

ttg acc aag goa tgt aag aaa gtt aca ggc tct ctt gag aaa ggg gaa Leu Thr Lys Ala Cys Lys Lys Val Thr Gly Ser Leu Glu Lys Gly Gly Glu 1828  gaa caa tat ggt goa gat gga gag act gaa ggc caa ggg cta gac acc glu Gln Gly Thr 1844 1849  aca gct ccg ggg ctc atg gga aca gag cag tta tcc aca gag ctg gac Thr Ala Pro Gly Leu Met Gly Thr Glu Gln Leu Ser Thr Glu Leu Asp 1850  aca gct ccg ggg ctc atg gga aca gag cag tta tcc aca gag ctg gac Thr Ala Pro Gly Leu Met Gly Thr Glu Gln Leu Ser Thr Glu Leu Asp 1867  agt aaa acc cca acg ccc cca gca ccc act ctg cta aaa atg acc tct ser Lys Thr Pro Thr Pro Pro Ala Pro Thr Leu Leu Lys Met Thr Ser 1876  agc cct gtg ggc ccg ggc act gcc tca gga gca ccc agc tca ctg gg Ser Pro Val Gly Pro Gly Thr Ala Ser Ala Gly Pro Ser Leu Pro Gly 1892  ggt gct ctc ccc aca gt gta cgc tcg aca aca aca act ctg gta ccc gly Ala Leu Pro Thr Ser Val Arg Ser Ile Val Thr Thr Leu Val Pro 1908  1913  1918  1924  1924  1929  1934  1940  194																		
Glu Gln Tyr Gly Ala Asp Gly Glu Thr Glu Gly Gln Gly Leu Asp Thr 1844  1849  aca gct ccg ggg ctc atg gga aca gga cag tta tcc aca gag ctg gac Thr Ala Pro Gly Leu Met Gly Thr Glu Gln Leu Ser Thr Glu Leu Asp 1860  1860  1860  1860  1870  agt aaa acc cca acg ccc cca gca ccc act ctg cta aaa atg acc tct Ser Lys Thr Pro Thr Pro Pro Ala Pro Thr Leu Leu Lys Met Thr Ser 1876  agc cct gtg ggc ccg ggc act gcc tca gca gga ccc agc tta cct ggc Ser Pro Val Gly Pro Gly Thr Ala Ser Ala Gly Pro Ser Leu Pro Gly 1892  1897  1902  1907  ggt gct ctc ccc acc agt gta cgc tcg ata gta acc act ctg gta ccc Gly Ala Leu Pro Thr Ser Val Arg Ser Ile Val Thr Thr Leu Val Pro 1908  1914  1929  1934  1934  1939  1946  1956  1860  1870  6042  Ser Glu Leu Ile Ser Ala Val Pro Thr Thr Lys Ser Asn His Gly Gly 1940  1950  1960  1971  1972  1974  1982  1980  1981  1982  1990  1985  6042  Ser Glu Leu Ile Ser Ala Val Pro Thr Thr Lys Ser Asn His Gly Gly 1940  1945  1950  1950  1955  1966  6138  Ser His Pro Glu Leu Leu Pro Ser Ile Ala Pro Ser Gln Asn Leu Val 1940  1940  1950  1955  1966  6138  Ser His Pro Glu Leu Leu Pro Ser Ile Ala Pro Ser Gln Asn Leu Val 1972  1977  1982  1982  1987  1987  1987  1982  1987  1987  1987  1987  1988  1993  1993  1998  2003  aaa gac ctg gag gta aat gct gca ata gct ctg gag ag ag ag ag ag acc 6186  1860  6186  6234  6364  6378  6386  6378  6378	Let	ı Thr	aag Lys	gca Ala	tgt Cys	Lys	Lys	gtt Val	aca Thr	Gl <sup>7</sup>	/ Ser	Leu	gag Glu	aaa Lys	a ggg Gly	Glu	575	4
Thr Ala Pro Gly Leu Met Gly Thr Glu Gln Leu Ser Thr Glu Leu Asp 1860  1875  1881  1881  1881  1886  1881  1886  1881  1886  1881  1886  1881  1886  1881  1886  1886  1881  1886  1886  1887  1881  1886  1886  1887  1881  1886  1886  1886  1887  1886  1886  1887  1886  1886  1887  1886  1887  1886  1886  1887  1886  1886  1897  1990  1990  1990  1990  1990  1990  1991  1992  1993  1993  1993  1993  1993  1994  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1939  1934  1945  1946  1946  1946  1946  1946  1946  1946  1946  1946  1946  1946  19	Glu	ı Gln	ı tat ı Tyr	ggt Gly	gca Ala	. Asp	gga Gly	gag Glu	act Thr	gaa Glu	ı Gly	Gln	Gly Ggg	cta Leu	a gac ı Asp	Thr	580:	2
Ser Lys Thr Pro Thr Pro Pro Ala Pro Thr Leu Leu Lys Met Thr Ser 1891  agc cct ggt ggc ccg ggc act gcc agc cta gcg ggc ccc agc tta cct ggc Ser Pro Val Gly Pro Gly Thr Ala Ser Ala Gly Pro Ser Leu Pro Gly 1892  ggt gct ctc ccc acc agt gta cgc tcg ata gta acc act ctg gta ccc Gly Ala Leu Pro Thr Ser Val Arg Ser Ile Val Thr Thr Leu Val Pro 1913  tcc gag ctc atc tcc gcc gta ccg aca aaa agc aat cat ggt ggc Ser Glu Leu Ile Ser Ala Val Pro Thr Thr Lys Ser Asn His Gly Gly 1924  1924  1929  1840  ata gca tct gag tca ctt gcg ggt ggc cta gtg gag gag aag gtg gga G090  Tle Ala Ser Glu Ser Leu Ala Gly Gly Leu Val Glu Glu Lys Val Gly 1945  1940  1950  1956  1961  1976  1976  1988  1997  1998  1908  1909  1907  1907  1907  1908  1909  1907  1907  1907  1907  1908  1909	Thr	Ala	ccg Pro	Gly	Leu	Met	gga Gly	aca Thr	gag Glu	caç Glr	Leu	Ser	aca Thr	gag	Leu	Asp	5850	0
Ser Pro Val Gly Pro Gly Thr Ala Ser Ala Gly Pro Ser Leu Pro Gly 1892 1897 1902 1907  ggt gct ctc ccc acc agt gta cgc tcg ata gta acc act ctg gta ccc Gly Ala Leu Pro Thr Ser Val Arg Ser Ile Val Thr Thr Leu Val Pro 1908 1913 1918 1923  tcc gag ctc atc tcc gcc gta ccg acc aca aaa agc aat cat ggt ggc Ser Glu Leu Ile Ser Ala Val Pro Thr Thr Lys Ser Asn His Gly Gly 1929 1934 1939 1939  ata gca tct gag tca ctt gcg ggt ggc cta gtg gag gag gag gag gg gg gg at gle Ile Ala Ser Glu Ser Leu Ala Gly Gly Leu Val Glu Glu Lys Val Gly 1940 1945 1950 1955  tcc cat cca gaa ctt cta ccc agc ata gcc ccg tcg cag aat tta gtc Ser His Pro Glu Leu Leu Pro Ser Ile Ala Pro Ser Gln Asn Leu Val 1956 1961 1966 1971  tca aag gaa act tca acc aca gca ctg cag gcc tct gtt gcc aga cca Ser Lys Glu Thr Ser Thr Thr Ala Leu Gln Ala Ser Val Ala Arg Pro 1972 1977 1982 1987  gag ctg gag gta aat gcc gcc ata gtc tct gg caa agc cc Glu Leu Glu Val Asn Ala Ala Ile Val Ser Gly Ser Ser Glu Pro 1988 1993 1998 1998 2003  aaa gag ata gtt gaa aag tcc aaa atc cca ggc cga aga aac tcc cga Lys Glu Ile Val Glu Lys Ser Lys Ile Pro Gly Arg Arg Arg Asn Ser Arg 2004 2009 2014 2019  act gaa gag cca act ggc cct tct gaa agt gga caa agg cac Gas Cga cac gaa cac gaa gaa aact cc cga Cag acc acc gaa gaa aact cc cag Cag acc acc gaa acc gaa gaa acc gaa gaa acc dc gaa acc gaa gaa acc dc gaa gaa acc dc gaa gaa acc dc gaa acc gaa gaa acc dc gaa gaa acc dc gaa acc gaa gaa acc dc gaa gaa acc dc gaa gaa acc dc gaa acc gaa gaa acc dc gaa acc gaa gaa acc dc gaa acc gaa gaa acc dc gaa acc gaa gaa acc dc gaa acc gaa gaa acc dc gaa gaa acc dc gaa gaa acc dc gaa gaa acc dc gaa acc gaa gaa acc dc gaa gaa acc dc gaa gaa acc dc gaa gaa acc dc gaa gaa acc gaa gaa acc gaa gaa acc gaa gaa	Ser	Lys	acc Thr	cca Pro	Thr	Pro	cca Pro	gca Ala	ccc Pro	act Thr	Leu	cta Leu	aaa Lys	atg Met	Thr	Ser	5898	3
Gly Ala Leu Pro Thr Ser Val Arg Ser Ile Val Thr Thr Leu Val Pro 1923  tcc gag ctc atc tcc gcc gta ccg acc aca aaa agc aat cat ggt ggc Ser Glu Leu Ile Ser Ala Val Pro Thr Thr Lys Ser Asn His Gly Gly 1934  1924 1929 1934  ata gca tct gag tca ctt gcg ggt ggc cta gtg gag gag gag ggg ggt ggc ggc ggc ggc ggc ggc ggc gg	Ser	Pro	gtg Val	ggc	Pro	Gly	act Thr	gcc Ala	tca Ser	gca Ala	Gly	ccc Pro	agc Ser	tta Leu	Pro	Gly	5946	5
tcc gag ctc atc tcc gcc gta ccg acc aca aaa agc aat cat ggt ggc Ser Glu Leu Ile Ser Ala Val Pro Thr Thr Lys Ser Asn His Gly Gly 1939  ata gca tct gag tca ctt gcg ggt ggc cta gtg gag gag gag aag gtg gga Glu Glu Lys Val Gly 1940  1940  1940  1940  1945  1950  1955  1955  1961  1961  1970  1982  1988  1988  1993  1993  1988  1993  1993  1998  1993  1998  1993  1998  1998  1993  1998  1998  1998  1998  1998  1998  1998  1998  1998  1998  1998  1098	Gly	gct Ala	ctc Leu	ccc Pro	Thr	Ser	gta Val	cgc Arg	tcg Ser	Ile	Val	acc Thr	act Thr	ctg Leu	Val	Pro	5994	Ł
The Ala Ser Glu Ser Leu Ala Gly Gly Leu Val Glu Lys Val Gly 1940 1945 1950 1955  tcc cat cca gaa ctt cta ccc agc ata gcc ccg tcg cag aat tta gtc Ser His Pro Glu Leu Leu Pro Ser Ile Ala Pro Ser Gln Asn Leu Val 1956 1971  tca aag gaa act tca acc aca gca ctg cag gcc tct gtt gcc aga cca Ser Lys Glu Thr Ser Thr Thr Ala Leu Gln Ala Ser Val Ala Arg Pro 1972 1977 1982 1987  gag ctg gag gta aat gct gcc ata gtc tct gga caa agc agt gag ccc Glu Leu Glu Val Asn Ala Ala Ile Val Ser Gly Gln Ser Ser Glu Pro 1988 1993 1998 2003  aaa gag ata gtt gaa aag tcc aaa atc cca gc cga aga aac tcc cga Lys Glu Ile Val Glu Lys Ser Lys Ile Pro Gly Arg Arg Asn Ser Arg 2004 2009 2014 2019  act gaa gag cca act gtg gcc tct gaa agt gtg gaa aat gga cat cgt Thr Glu Glu Pro Thr Val Ala Ser Glu Ser Val Glu Asn Gly His Arg 2020 2025 2030 2035  aaa cga tct tct cga cct gct tca gcc tcc agc tct act aaa gac ata Lys Arg Ser Ser Arg Pro Ala Ser Ala Ser Ser Ser Thr Lys Asp Ile	Ser	gag Glu	ctc Leu	atc Ile	Ser	Ala	gta Val	ccg Pro	acc Thr	Thr	Lys	agc Ser	aat Asn	cat His	Gly	Gly	6042	<u> </u>
tcc cat cca gaa ctt cta ccc agc ata gcc ccg tcg cag aat tta gtc Ser His Pro Glu Leu Leu Pro Ser Ile Ala Pro Ser Gln Asn Leu Val 1956 1961 1966 1971  tca aag gaa act tca acc aca gca ctg cag gcc tct gtt gcc aga cca Ser Lys Glu Thr Ser Thr Thr Ala Leu Gln Ala Ser Val Ala Arg Pro 1972 1977 1982 1987  gag ctg gag gta aat gct gcc ata gtc tct gga caa agc agt gag ccc Glu Leu Glu Val Asn Ala Ala Ile Val Ser Gly Gln Ser Ser Glu Pro 1988 1993 1998 2003  aaa gag ata gtt gaa aag tcc aaa atc cca ggc cga aga aac tcc cga Lys Glu Ile Val Glu Lys Ser Lys Ile Pro Gly Arg Arg Asn Ser Arg 2004 2009 2014 2019  act gaa gag cca act gtg gcc tct gaa agt gtg gaa aat ggc cat cgt Thr Glu Glu Pro Thr Val Ala Ser Glu Ser Val Glu Asn Gly His Arg 2020 2025 2030 2035  aaa cga tct tct cga cct gct tca gcc tcc agc tct act aaa gac ata Lys Arg Ser Ser Arg Pro Ala Ser Ala Ser Ser Ser Thr Lys Asp Ile	Ile	gca Ala	tct Ser	gag Glu	Ser	Leu	gcg Ala	ggt Gly	ggc Gly	Leu	Val	gag Glu	gag Glu	aag Lys	Val	Gly	6090	,
Ser Lys Glu Thr Ser Thr Thr Ala Leu Gln Ala Ser Val Ala Arg Pro 1972 1977 1982 1987  gag ctg gag gta aat gct gcc ata gtc tct gga caa agc agt gag ccc Glu Leu Glu Val Asn Ala Ala Ile Val Ser Gly Gln Ser Ser Glu Pro 1988 1993 1998 2003  aaa gag ata gtt gaa aag tcc aaa atc cca ggc cga aga aac tcc cga Lys Glu Ile Val Glu Lys Ser Lys Ile Pro Gly Arg Arg Asn Ser Arg 2004 2009 2014 2019  act gaa gag cca act gtg gcc tct gaa agt gtg gaa aat gga cat cgt Thr Glu Glu Pro Thr Val Ala Ser Glu Ser Val Glu Asn Gly His Arg 2020 2025 2030 2035  aaa cga tct tct cga cct gct tca gcc tcc agc tct act aaa gac ata Lys Arg Ser Ser Arg Pro Ala Ser Ala Ser Ser Ser Thr Lys Asp Ile	Ser	cat His	cca Pro	gaa Glu	Leu	Leu	ccc Pro	agc Ser	ata Ile	Ala	Pro	tcg Ser	cag Gln	aat Asn	Leu	Val	6138	
Glu Leu Glu Val Asn Ala Ala Ile Val Ser Gly Gln Ser Ser Glu Pro 1988 1993 1998 2003  aaa gag ata gtt gaa aag tcc aaa atc cca ggc cga aga aac tcc cga Lys Glu Ile Val Glu Lys Ser Lys Ile Pro Gly Arg Arg Asn Ser Arg 2004 2009 2014 2019  act gaa gag cca act gtg gcc tct gaa agt gtg gaa aat gga cat cgt Thr Glu Glu Pro Thr Val Ala Ser Glu Ser Val Glu Asn Gly His Arg 2020 2025 2030 2035  aaa cga tct tct cga cct gct tca gcc tcc agc tct act aaa gac ata Lys Arg Ser Ser Arg Pro Ala Ser Ala Ser Ser Ser Thr Lys Asp Ile	Ser	aag Lys	gaa Glu	act Thr	Ser	Thr	aca Thr	gca Ala	ctg Leu	Gln	Ala	tct Ser	gtt Val	gcc Ala	Arg	Pro	6186	
Lys Glu Ile Val Glu Lys Ser Lys Ile Pro Gly Arg Arg Asn Ser Arg 2004  2009  2014  2019  act gaa gag cca act gtg gcc tct gaa agt gtg gaa aat gga cat cgt Thr Glu Glu Pro Thr Val Ala Ser Glu Ser Val Glu Asn Gly His Arg 2020  2025  2030  2035  aaa cga tct tct cga cct gct tca gcc tcc agc tct act aaa gac ata Lys Arg Ser Ser Arg Pro Ala Ser Ala Ser Ser Ser Thr Lys Asp Ile	Glu	ctg Leu	gag Glu	gta Val	Asn	Ala	gcc Ala	ata Ile	gtc Val	Ser	Gly	caa Gln	agc Ser	agt Ser	Glu	Pro	6234	
Thr Glu Glu Pro Thr Val Ala Ser Glu Ser Val Glu Asn Gly His Arg 2020 2025 2030 2035  aaa cga tct tct cga cct gct tca gcc tcc agc tct act aaa gac ata Lys Arg Ser Ser Arg Pro Ala Ser Ala Ser Ser Ser Thr Lys Asp Ile	Lys	gag Glu	ata Ile	gtt Val	Glu	Lys	tcc Ser	aaa Lys	atc Ile	Pro	Gly	cga Arg	aga Arg	aac Asn	Ser	Arg	6282	
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	Lys	cga Arg	tct Ser	tct Ser	Arg	Pro .	gct Ala	tca Ser	gcc Ala	Ser	Ser	tct Ser	act Thr	aaa Lys	Asp	Ile	6378	



5 8	3				63	3				68	3				73	
cat His	s Val	t gaa L Glu	a gga ı Gly	a gta Val	a gaa l Glu 79	\Val	g gad Asp	tta Lei	a gag ı Glı	g tct 1 Ser 84	: Ile	aga Arg	aga JArg	ı ata ∫ Il∈	a aac e Asn 89	353
aag Lys 90	s Ala	aaa Lys	aat Asn	gaa Glu	caa Gln 95	Glu	g cac His	c cat His	gct Ala	gga Gly 100	gly	a gat / Asp	tco Ser	cag Glr	g aaa Lys 105	401
gat Asp 106	) Ile	atg Met	cag Gln	agg Arg	cag Gln 111	Tyr	cto Leu	aca Thr	ttt Phe	aag Lys 116	Pro	cag Gln	aca Thr	ttc Phe	acc Thr 121	449
tac Tyr 122	His	gat Asp	cct Pro	gtg Val	ctt Leu 127	cgc Arg	cca Pro	gly ggg	atc Ile	ctc Leu 132	ggt Gly	aac Asn	ttt Phe	gaa Glu	ccc Pro 137	497
aaa Lys 138	Glu	. cct . Pro	gag Glu	cct Pro	cct Pro 143	gga Gly	gtg Val	gtt Val	ggt Gly	ggc Gly 148	cct Pro	Gly ggg	aga Arg	gaa Glu	agc Ser 153	545
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aat Asn 218	gaa Glu	gga Gly	tgg Trp	tca Ser	acc Thr 223	ctc Leu	atg Met	aga Arg	aca Thr	gtc Val 228	cac His	agt Ser	gta Val	att Ile	aaa Lys 233	785
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tgg Trp 266	aat Asn	ggc Gly	cta Leu	gtg Val	aag Lys 271	gta Val	ttt Phe	cga Arg	aat Asn	gaa Glu 276	aga Arg	agg Arg	gaa Glu	ggt Gly	tta Leu 281	929
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ttg Lei 298	ı Ile	tac Tyr	ctt Leu	gat Asp	gcc Ala 303	His	tgt Cys	gag Glu	gtg Val	gca Ala 308	. Val	aac Asn	tgg Trp	tat Tyi	gca Ala 313	1025
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gcc Ala 394	att Ile	gaa Glu	cga Arg	gag Glu	ttc Phe 399	ttc Phe	ttt Phe	gaa Glu	ttg Leu	ggt Gly 404	ctc Leu	tat Tyr	gat Asp	cca Pro	ggt Gly 409	1313
ctc Leu 410	cag Gln	att Ile	tgg Trp	ggt Gly	ggt Gly 415	gaa Glu	aac Asn	ttt Phe	gag Glu	atc Ile 420	tca Ser	tac Tyr	aag Lys	ata Ile	tgg Trp 425	1361
cag Gln 426	tgt Cys	ggt Gly	ggc	aaa Lys	tta Leu 431	tta Leu	ttt Phe	gtt Val	cct Pro	tgt Cys 436	tct Ser	cgt Arg	gtt Val	gga Gly	cat His 441	1409
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cac His 506	aac Asn	tgc Cys	aaa Lys	Ser	ttt Phe 511	aag Lys '	tgg Trp	ttc Phe	Met	gaa Glu 516	gaa Glu	ata Ile	gct Ala	tat Tyr	gat Asp 521	1649

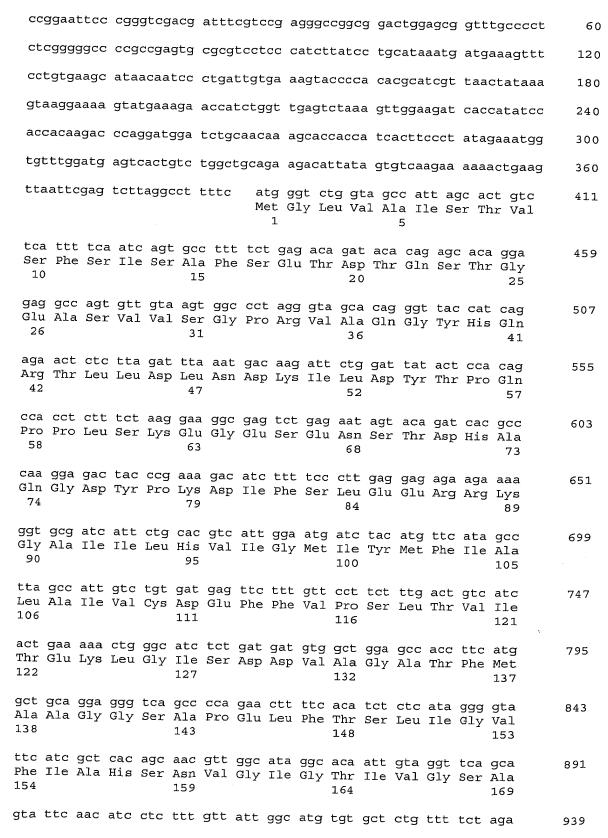


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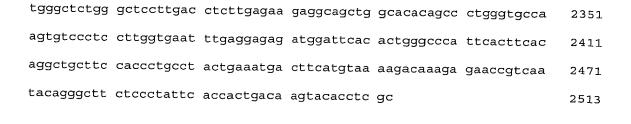
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	gaa Glu 186	1 TT6	c tta e Lei	a aac ı Asr	cto Leu	g aca I Thr 191	Trr	tgg Trp	g ccg	g cto Lei	tti Phe 196	e Ar	a gat g Asj	gte Val	g tc: l Se:	t ttc r Phe 201	987
	tac Tyr 202	: I1e	gtt Val	gac L Asp	ttg Leu	ato Ile 207	Met	ctg Leu	g ato Ile	ata : Ile	ttte Phe	e Ph	c cto e Lei	g gat ı Asp	c aat o Asr	gtc Val 217	1035
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4 12	atg Met 250	ata Ile	aac Asn	cgc Arg	aat Asn	aag Lys 255	gtc Val	gtc Val	aag Lys	gtg Val	aca Thr 260	· Ala	cca Pro	gaa Glu	gco Ala	caa Gln 265	1179
Total And State of the Control of th	gca Ala 266	aag Lys	cca Pro	tct Ser	gca Ala	gcc Ala 271	agg Arg	gac Asp	aag Lys	gat Asp	gaa Glu 276	Pro	act Thr	cta Leu	. ccg . Pro	gct Ala 281	1227
Went way grow	aag Lys 282	ccg Pro	cgt Arg	ctc Leu	cag Gln	cga Arg 287	ggt Gly	gga Gly	agc Ser	tct Ser	gcc Ala 292	tcc Ser	ctc Leu	cac His	aac Asn	agt Ser 297	1275
4. FM	ctc Leu 298	atg Met	agg Arg	aat Asn	agc Ser	atc Ile 303	ttc Phe	caa Gln	ctc Leu	atg Met	ata Ile 308	cac His	acc Thr	ctt Leu	gac Asp	cca Pro 313	1323
And Hall Land	ctc Leu 314	gcc Ala	gaa Glu	gaa Glu	ctt Leu	gga Gly 319	tca Ser	tat Tyr	gga Gly	aaa Lys	cta Leu 324	aaa Lys	tat Tyr	tat Tyr	gac Asp	aca Thr 329	1371
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	gat Asp 378	gtt Val	gaa Glu	atg Met	Thr	cca Pro 383	tcc Ser	agt Ser	gat Asp	gct Ala	tca Ser 388	gaa Glu	cct Pro	gta Val	caa Gln	aat Asn 393	1563
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394	Ļ				399	)				404	4				409	
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att Ile 442	Thr	tta Leu	cct Pro	gac Asp	gtt Val 447	Arg	aaa Lys	cct Pro	tca Ser	tcg Ser 452	: Arg	aag Lys	ttt Phe	ttt Phe	ccc Pro 457	1755
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atg Met 474	gtc Val	tgg Trp	tgg Trp	gcg Ala	cac His 479	cag Gln	gtt Val	gga Gly	gag Glu	aca Thr 484	att Ile	ggc Gly	atc Ile	agt Ser	gaa Glu 489	1851
gag Glu 490	att Ile	atg Met	ggc	ctg Leu	acc Thr 495	atc Ile	ttg Leu	gct Ala	gct Ala	999 500	acc Thr	tcc Ser	atc Ile	cct Pro	gat Asp 505	1899
ctt Leu 506	atc Ile	acc Thr	agt Ser	gtc Val	ata Ile 511	gtg Val	gcc Ala	cgg Arg	aag Lys	999 Gly 516	cta Leu	gl <sup>y</sup> aaa	gac Asp	atg Met	gct Ala 521	1947
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cca Pro 538	ctg Leu	ccc Pro	tgg Trp	ctc Leu	ctg Leu 543	tac Tyr	acc Thr	gtc Val	att Ile	cac His 548	aga Arg	ttc Phe	cag Gln	cca Pro	gtg Val 553	2043
gct Ala 554	gtc Val	agc Ser	agc Ser	aat Asn	ggc Gly 559	ctt Leu	ttc Phe	tgt Cys	gcc Ala	atc Ile 564	gtc Val	ctt Leu	ctc Leu	ttc Phe	atc Ile 569	2091
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aac Asn 586	aaa Lys	atc Ile	ctg Leu	ggc Gly	ttc Phe 591	atc Ile	atg Met	ttt Phe	ggc Gly	ctc Leu 596	tac Tyr	ttt Phe	gtg Val	ttc Phe	ctg Leu 601	2187
gtg Val 602	gtg Val	agc Ser	gtt Val	ctc Leu	cta Leu 607	gaa Glu	gac Asp	aga Arg	att Ile	ctt Leu 612	aca Thr	tgc Cys	ccc Pro	gtc Val	tcc Ser 617	2235
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739

787

ttc acc atc cgc tgg tat cgc aac acg gag ctg gtg ctg cct gac gag

Phe Thr Ile Arg Trp Tyr Arg Asn Thr Glu Leu Val Leu Pro Asp Glu

gec atc tec atc ege ggg etc age aac gag acg etg etc atc acc teg

	Ala 53	a Il 1	e Se	r Il	e Ar	g Gly 50		ı Se	r Ası	ı Glı	1 Th:		ı Le	u Ile	e Th:	r Ser 66		
	gco Ala 67	a Gli	g aa n Ly	g ago s Se:	c ca r Hi	t tco s Sei 72	Gly	g gco / Ala	c tac a Tyr	cag Glr	g tgo 1 Cy: 7	s Phe	e Ala	a aco	c cgo	c aag g Lys 82	835	
	gco Ala 83	a Gli	g aco	c gco r Ala	c caq a Gli	g gac n Asp 88	Phe	gco Ala	ato Ile	att Ile	gca Ala 93	a Leu	gag ı Gli	g gat ı As <u>r</u>	ggo Gly	c acg 7 Thr 98	883	
	ccc Pro 99	Arg	ato g Ile	c gto e Val	c tcg l Sei	g tcc Ser 104	Phe	ago Ser	gag Glu	aag Lys	gto Val	. Val	aac Asr	c ccc Pro	Gl <sup>y</sup>	g gag 7 Glu 114	931	
	cag Gln 115	. Phe	tca Sei	a cto Leu	g ato 1 Met	g tgt Cys 120	Ala	gcc Ala	aag Lys	ggc Gly	gcc Ala 125	Pro	cco Pro	ccc Pro	acc Thr	gtc Val 130	979	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	acc Thr 131	Trp	gco Ala	cto Leu	gac Asp	gat Asp 136	gag Glu	ccc Pro	atc Ile	gtg Val	cgg Arg 141	Asp	ggc	ago Ser	cac His	cgc Arg 146	1027	
The same of the same of	acc Thr 147	Asn	cag Gln	tac Tyr	acc Thr	atg Met 152	tcg Ser	gac Asp	Gly	acc Thr	acc Thr 157	Ile	agc Ser	cac His	atg Met	aac Asn 162	1075	
	gtc Val 163	aca Thr	Gly	ccc Pro	cag Gln	atc Ile 168	cgc Arg	gac Asp	gly aaa	ggc	gtg Val 173	tac Tyr	cgg Arg	tgc Cys	aca Thr	gcg Ala 178	1123	
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	atg Met 259	gat Asp	gag Glu	g1y 999	gag Glu	tac Tyr 264	ctg Leu	tgc Cys	agt Ser	Val	ctc Leu 269	atc Ile	cag Gln	ccc Pro	cag Gln	ctc Leu 274	1411	
	tcc Ser	atc Ile	agc Ser	cag Gln	agc Ser	gtt Val	cac His	gta Val	gcc Ala	gtc Val	aaa Lys	gtg Val	ccc Pro	cct Pro	ctg Leu	atc Ile	1459	

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ccc tgt gtg gtg Pro Cys Val Val 307	tcc tcg ggg Ser Ser Gly 312	gac atg ccc Asp Met Pro	atc cgt atc acc Ile Arg Ile Thr 317	tgg agg 1555 Trp Arg 322
aag gac gga cag Lys Asp Gly Gln 323	gtg atc atc Val Ile Ile 328	tca ggc tcg Ser Gly Ser	ggc gtg acc atc Gly Val Thr Ile 333	gag agc 1603 Glu Ser 338
aag gaa ttc atg Lys Glu Phe Met 339	agc tcc ctg Ser Ser Leu 344	cag atc tct Gln Ile Ser	agc gtc tcc ctc Ser Val Ser Leu 349	aag cac 1651 Lys His 354
aac ggc aac tat Asn Gly Asn Tyr 355	aca tgc atc Thr Cys Ile 360	gcc agc aac Ala Ser Asn	gca gcc gcc acc Ala Ala Ala Thr 365	gtg agc 1699 Val Ser 370
cgg gag cgc cag Arg Glu Arg Gln 371	ctc atc gtg Leu Ile Val 376	Arg Val Pro	cct cga ttt gtg Pro Arg Phe Val 381	gtg caa 1747 Val Gln 386
ccc aac aac cag o Pro Asn Asn Gln 2 387	gat ggc atc Asp Gly Ile ' 392	Tyr Gly Lys	gct ggt gtg ctc Ala Gly Val Leu 397	aac tgc 1795 Asn Cys 402
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act tcc cac ccc a Thr Ser His Pro A 483	ac acc acc a sn Thr Thr I 488	Ile Ala Ile I	ag ggc cat gcg a ys Gly His Ala 1 .93	aag gag 2083 Lys Glu 498
cta aac tgc acg g Leu Asn Cys Thr A 499	ca cgg ggt g la Arg Gly G 504	Blu Arg Pro I	tc atc atc cgc t le Ile Ile Arg 7 09	ogg gag 2131 Frp Glu 514

aag Lys 515	Gly	gac Asp	c aca	gto Val	ato Ile 520	Asp	cct Pro	gac Asp	ago Arg	gto y Val 525	. Met	g cgg	j tat j Tyr	gco Ala	atc Ile 530		2179
gcc Ala 531	Thr	aag Lys	gac Asp	aac Asn	ggc Gly 536	Asp	gag Glu	gtc Val	gto Val	Ser 541	Thr	ctg Lev	aag Lys	cto Lev	aag Lys 546		2227
ccc Pro 547	Ala	gac Asp	cgt Arg	gly aaa	gac Asp 552	tct Ser	gtg Val	ttc Phe	ttc Phe	agc Ser 557	. CAa	cat His	gcc Ala	atc Ile	aac Asn 562		2275
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ggc Gly 723	agc Ser	aac Asn	gly aaa	cag Gln	tac Tyr 728	agc Ser	atc Ile	gtg Val	gag Glu	atg Met 733	aag Lys	gcc Ala	acg Thr	gjà aaa	gac Asp 738	:	2803

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	Gly 963	_	Gly	Asn	Ser	Ser 968	Glu	Lys	Val	Thr	Ile 973	Glu	Pro	Ala	Gly	Lys 978	
		Pro			atc Ile												3571
					cgg Arg					Ser					Ala		3619
	_		_		acc Thr	_	_	_		Asp	_	_			Val		3667
					cgg Arg					Asn			-		Leu	_	3715
					gag Glu					Tyr					Thr		3763
Hart Hare weet the					gac Asp					Asn					Val		3811
					cgc Arg					ГЛS					Ser		3859
Man And A with M					att Ile 1					Gly					Arg		3907
Handy Handy Arrib					tac Tyr 1					Ser					Asp		3955
					agc Ser 1					Lys					Lys		4003
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					gag Glu 1					Lys					Glu		4099
			_		gac Asp 1					Thr					Thr		4147
					ctg Leu												4195

	1187					1192					1197					1202	
					Glu		cgg Arg			Gly					Gln		4243
					Ser		gl <sup>à</sup> aaa			Phe					Arg		4291
					Glu		cgc Arg			Ala					Gly		4339
			_		Āla	_	ttc Phe	_		Leu	_		_		Ser		4387
					Lys		gct Ala			Glu					Lys		4435
The state of the state of					Gly		cct Pro			Leu					Val		4483
Will fire first	_				Val	_	aag Lys	_		Lys				-	Lys	_	4531
Hall Mall mail		_		-	Lys	-	ttg Leu	-	_	Met	_		_	_	Asn		4579
1.11 1.11 1.11 1.11	_			_	Thr		gtg Val			Pro		_			Arg		4627
					Pro		gtc Val			Leu					Glu		4675
		_		_	Gly		gac Asp	_	_	Thr					Āsp	_	4723
			-		Āla	_	aac Asn		_	Ser		_			Val		4771
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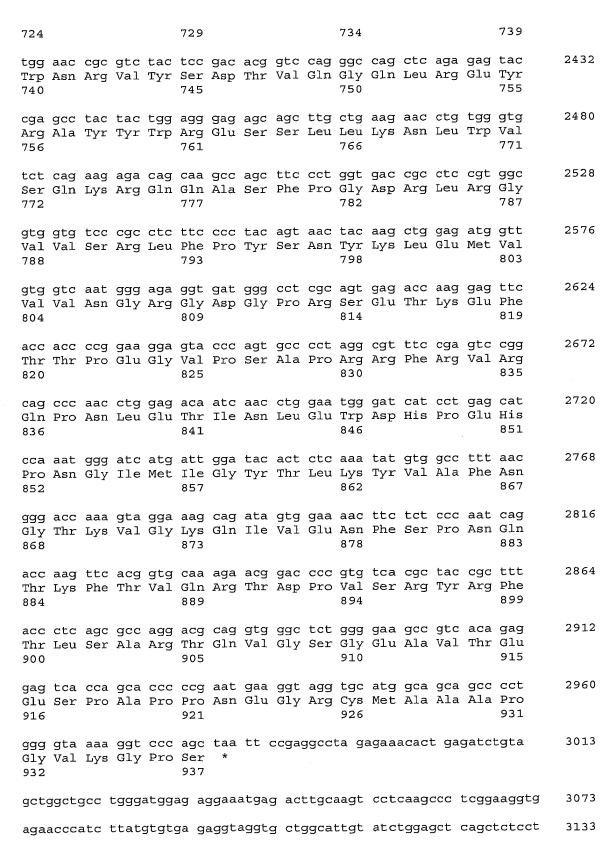
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				Leu	gag Glu 1512				Gln					Glu		5155
acc Thr 1523	gag Glu	tgc Cys	ttc Phe	Ile	tct Ser 1528	gac Asp	agt Ser	tcc Ser	Ser	gac Asp .533	cag Gln	atg Met	acc Thr	Thr	ggc Gly L538	5203
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Thr 500	Cys	Val	Ala	ser	Thr 505	Glu	Leu	Asp	Gln	Asp 510	Leu	Ala	Lys	Ala	Tyr 515		
			cta Leu													176	30
			gag Glu													180	8 (
			ccc Pro					_	-	_		_	-	_	_	185	6
			Gl <sup>y</sup> aaa	-			_			_				_	_	190	)4
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			atc Ile													200	0
	_		cga Arg		_		-								_	204	: 8
	_		gag Glu			_	_			_			_		_	209	6
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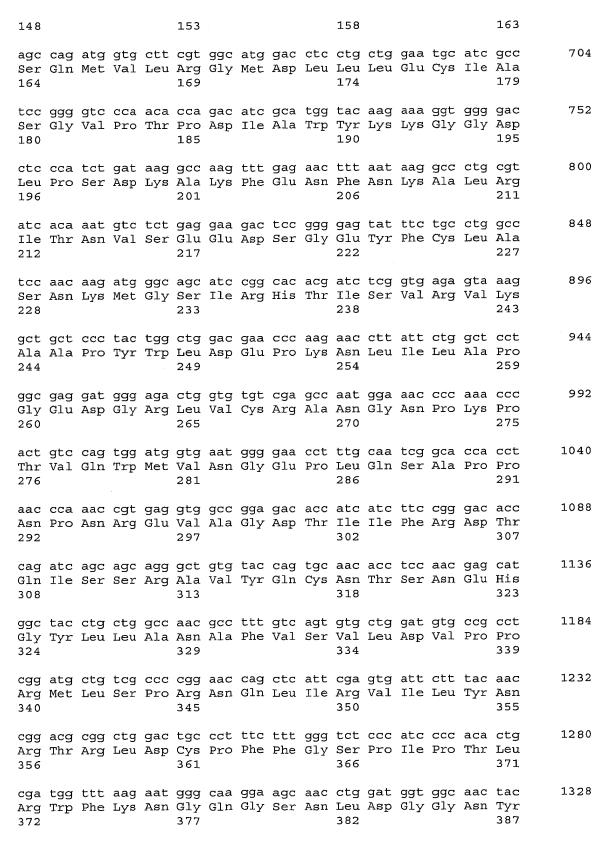
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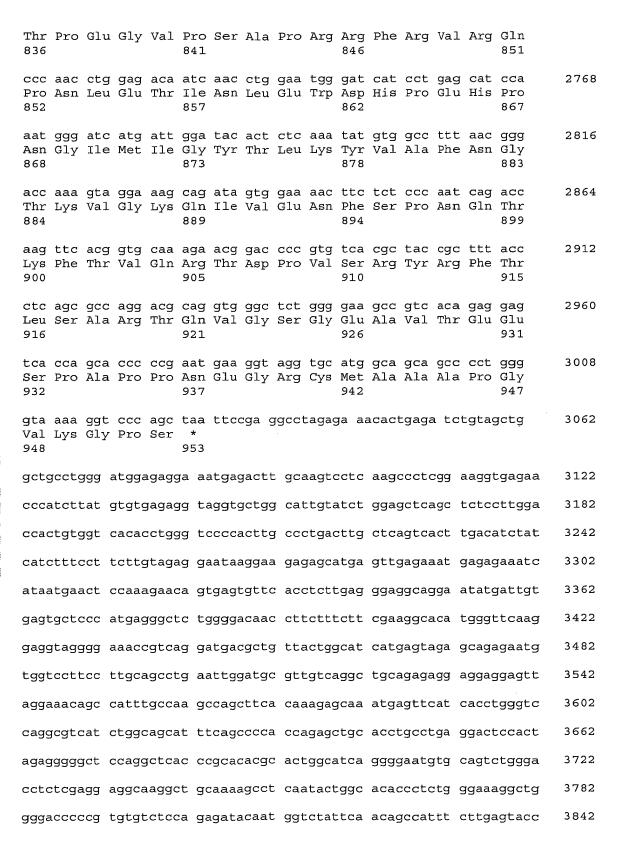


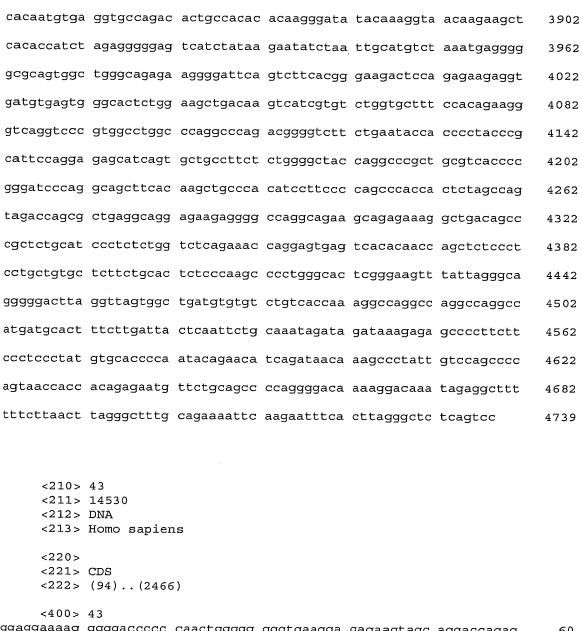
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_	_	_		_	ctc Leu 473					_	-	_	_	_	1616
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			_		cat His 585	_		_							1952
					ctg Leu 601										2000

The Ala Ile Asn Glu																	
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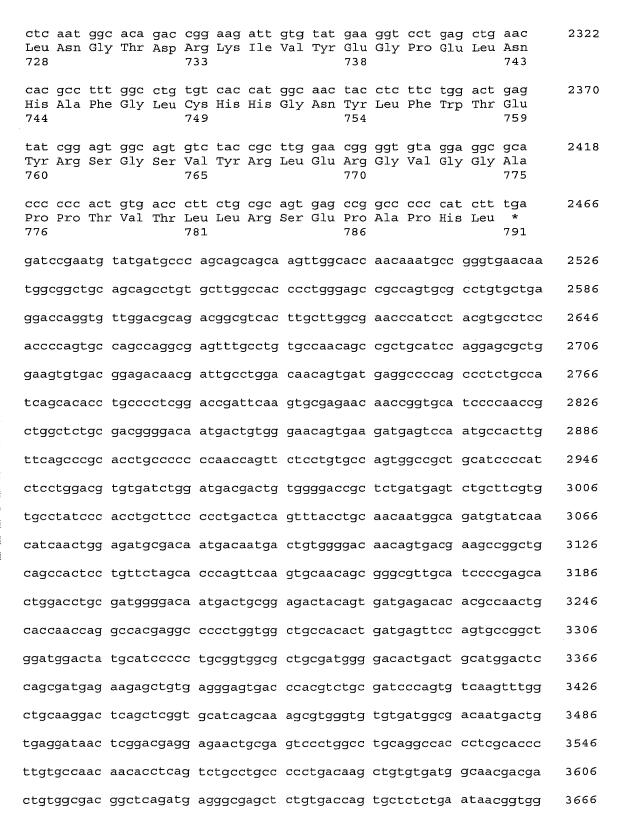




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atc Ile 408	ctg Leu	att Ile	gag Glu	cac His	ctg Leu 413	tac Tyr	ggc Gly	ctg Leu	act Thr	gtg Val 418	ttt Phe	gag Glu	aat Asn	tat Tyr	ctc Leu 423	1362
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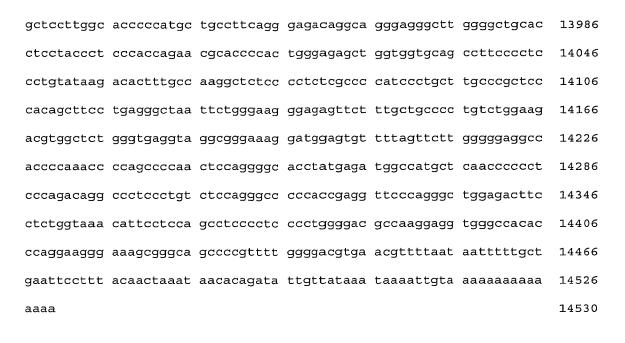


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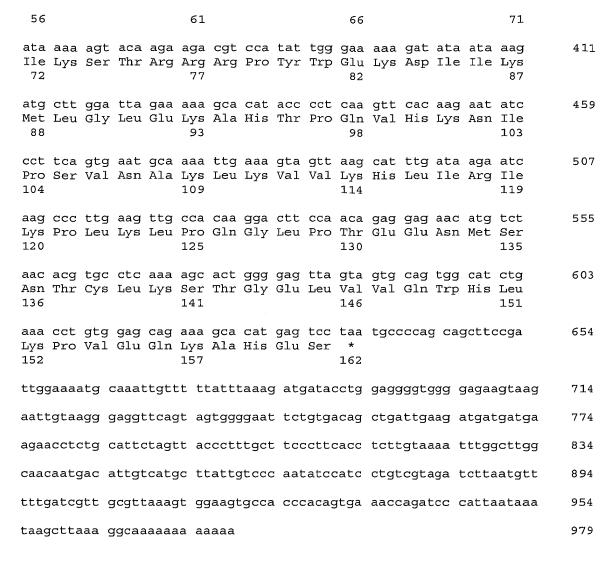




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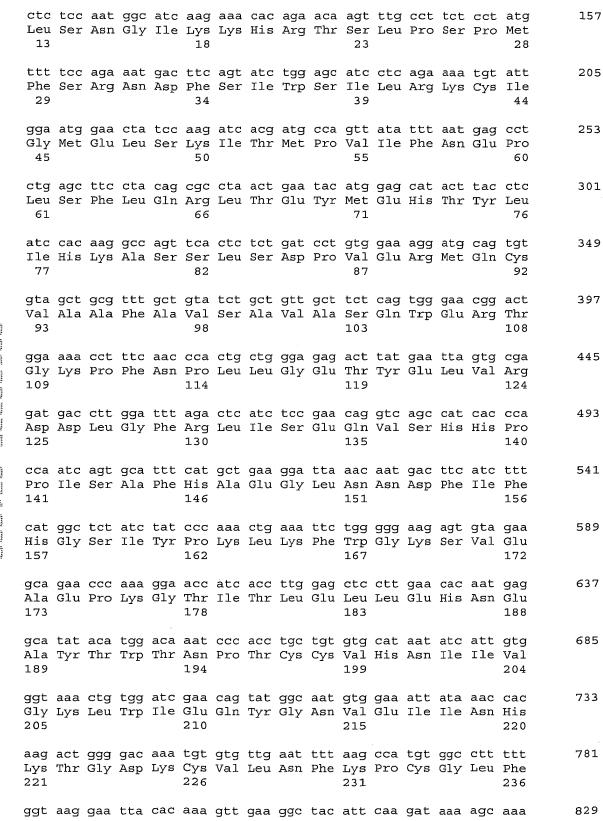
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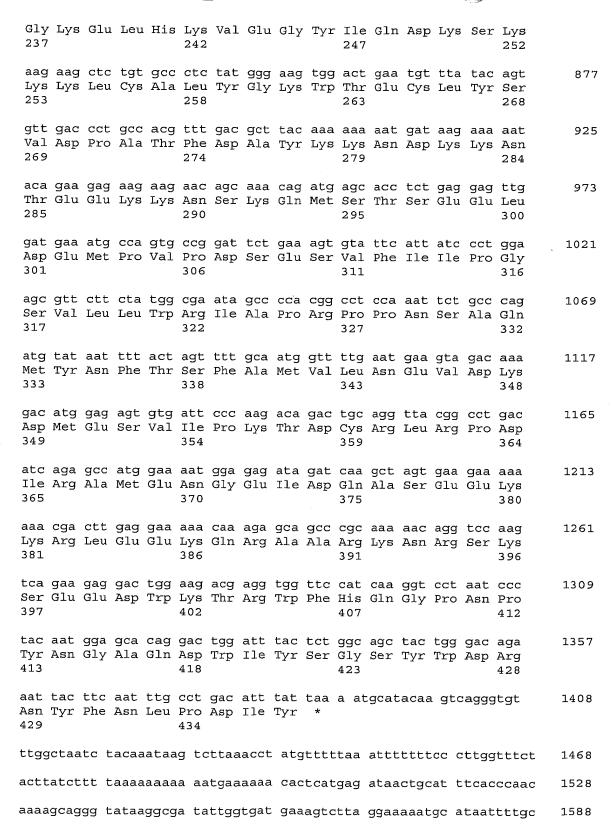
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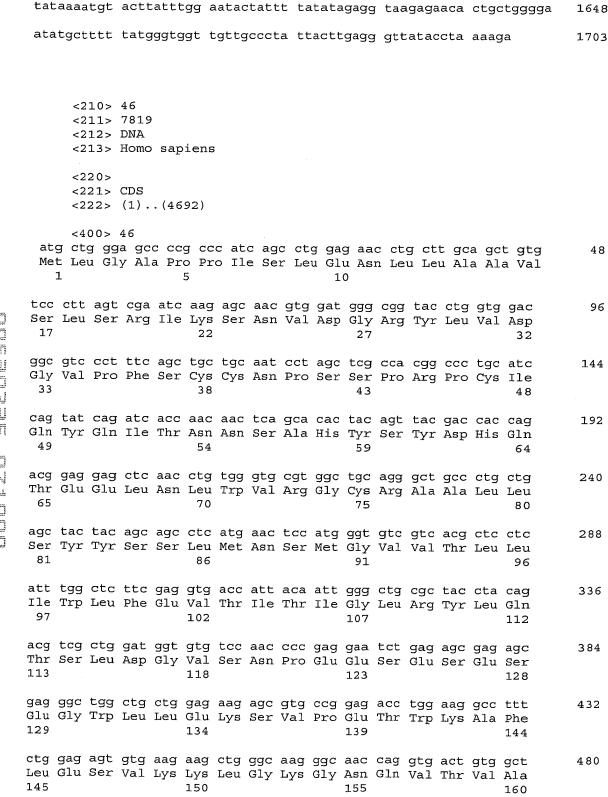
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Ile 16]	Asr	ı Lys	s Asn	ı Ile	Ser 166	Ser	Asp	) Pro	Leu	171	Arg	g Ala	Val	. Asp	176	220
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ctt Leu 193	Asn	aaa Lys	tac Tyr	aga Arg	tgc Cys 198	ctg Leu	ctc Leu	cta Leu	gaa Glu	gat Asp 203	Ala	atg Met	cga Arg	atc Ile	aat Asn 208	624
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aga Arg 225	gct Ala	tcc Ser	ctg Leu	tcc Ser	cga Arg 230	gac Asp	aag Lys	cgt Arg	ttg Leu	gca Ala 235	ctt Leu	gta Val	gac Asp	cct Pro	gag Glu 240	720
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						ctc Leu										1296
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						tct Ser										1392
						aac Asn										1440
						gat Asp										1488
						ttg Leu										1536
						ttg Leu							-	_		1584
						aac Asn										1632
						cag Gln										1680
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	Gln										Gln				agc Ser 864	2592
act Thr 865	gl <sup>y</sup> aaa	ggc	agt Ser	att Ile	gtt Val 870	att Ile	cat His	tcc Ser	ccc Pro	atg Met 875	Gly	caa Gln	cct Pro	cac His	gca Ala 880	2640
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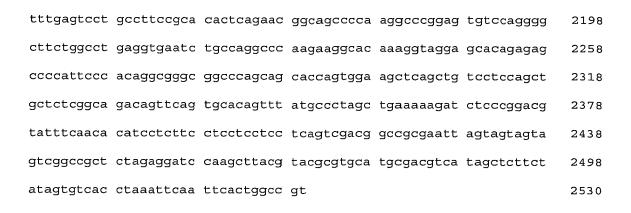


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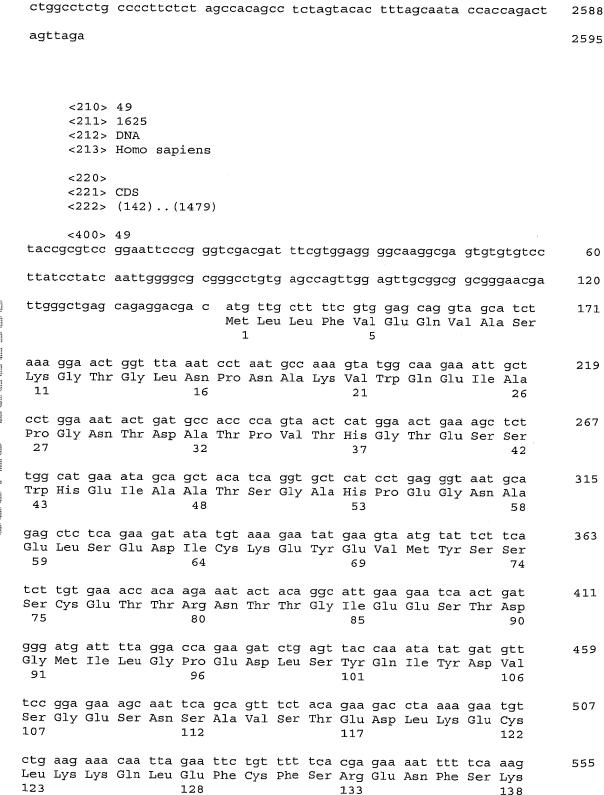
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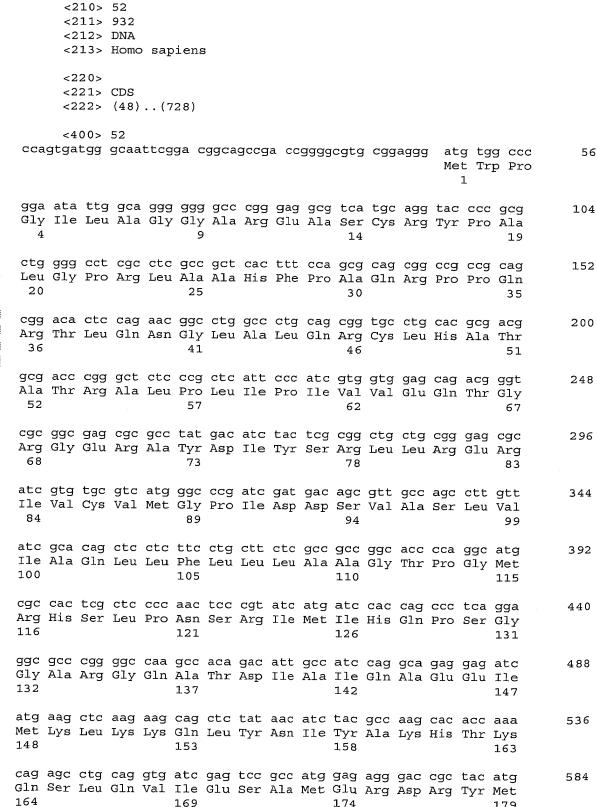
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tct Ser 402		taa *	taat	taaa	gt g	gctt	tcat	a at	aaaa	aaaa	aaa	a				1301



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Leu Arg \*

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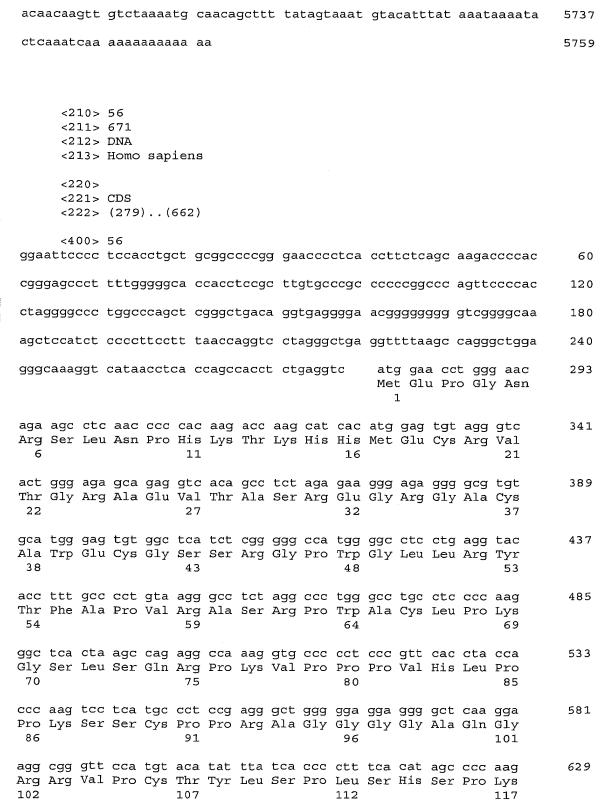
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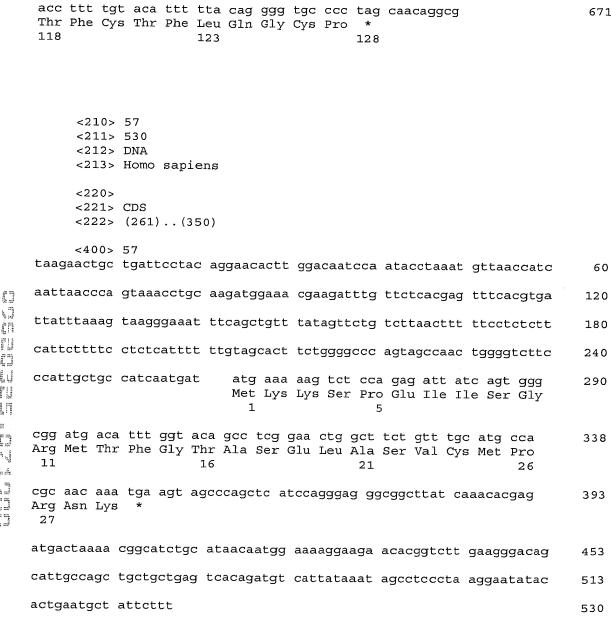
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tcc gag gcg ttc tcc cga ctc tgg acc gac gtg atg ggt atc ctg gac Ser Glu Ala Phe Ser Arg Leu Trp Thr Asp Val Met Gly Ile Leu Asp 38 43 48 53	739
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ccc acg tca ctt cag ctg cgg tcc cag atc gaa gag tcg ctt ggc ttc Pro Thr Ser Leu Gln Leu Arg Ser Gln Ile Glu Glu Ser Leu Gly Phe 102 117	931
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aaa tca aac tca gaa gac agc tct gta gga aaa gga gac tgg aag aag Lys Ser Asn Ser Glu Asp Ser Ser Val Gly Lys Gly Asp Trp Lys Lys	1027

134	:				139	€				144	<u>L</u>				149	
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atg Met 166	Arg	cag Gln	act Thr	tca Ser	aaa Lys 171	Gly	gaa Glu	gac Asp	gtt Val	ggt Gly 176	Tyr	gtt Val	gcc Ala	agt Ser	gaa Glu 181	1123
ata Ile 182	Thr	atg Met	ago Ser	gat Asp	gag Glu 187	Glu	cgg Arg	att Ile	cag Gln	cta Leu 192	Met	at <u>c</u> Met	atg : Met	gto Val	aaa Lys 197	1171
gaa Glu 198	aag Lys	atg Met	atc Ile	aca Thr	att Ile 203	Glu	gaa Glu	gca Ala	ctt Leu	gct Ala 208	Arg	cto	aag Lys	gaa Glu	tac Tyr 213	1219
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gat Asp 230	ggt Gly	tct Ser	tac Tyr	cca Pro	acg Thr 235	ttt Phe	gat Asp	ggc Gly	tca Ser	tca Ser 240	aac Asn	tgc Cys	aat Asn	tca Ser	aga Arg 245	1315
gaa Glu 246	caa Gln	tcg Ser	gat Asp	gat Asp	gag Glu 251	act Thr	gag Glu	gag Glu	tcg Ser	gtg Val 256	aag Lys	ttt Phe	aag Lys	agg Arg	tta Leu 261	1363
cac His 262	aag Lys	ctg Leu	gta Val	aac Asn	tcc Ser 267	act Thr	cgc Arg	aga Arg	gtc Val	aga Arg 272	aag Lys	aaa Lys	cta Leu	att Ile	agg Arg 277	1411
gtg Val 278	gaa Glu	gaa Glu	atg Met	aaa Lys	aaa Lys 283	ccc Pro	agc Ser	act Thr	gaa Glu	ggt Gly 288	gly gag	gag Glu	gag Glu	cac His	gtg Val 293	1459
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gtg Val 310	cac His	aag Lys	aag Lys	ccc Pro	ctt Leu 315	ttc Phe	ttt Phe	gat Asp	ggc Gly	tct Ser 320	cct Pro	gag Glu	aaa Lys	cct Pro	ccc Pro 325	1555
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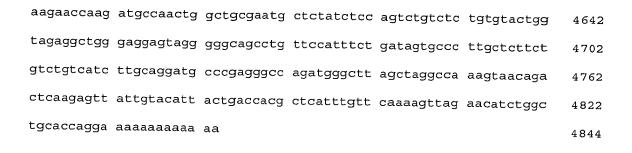
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	Cy: 822	s Gl	u Th	r Le	u Gl	u Gl <sub>3</sub> 82	y Pro 7	Glı	n Thi	C Va	1 As <sub>]</sub> 83:		r Trj	o Pro	o Arg	g Ser 837	
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A. 8 Tim Tip I.A	tct Ser 918	GTY	cgc Arg	ggo Gly	cto Leu	tca Ser 923	ccc Pro	cct Pro	cag Gln	tgt Cys	ttg Leu 928	ccc Pro	aga Arg	aac Asn	tat Tyr	gat Asp 933	3379
The said from the said	gct Ala 934	cag Gln	cct Pro	cct Pro	gga Gly	gct Ala 939	aaa Lys	cac His	ggt Gly	tta Leu	gca Ala 944	agg Arg	acg Thr	cct Pro	ctg Leu	gag Glu 949	3427
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An Ing	gtc Val 1174	tct Ser	cct Pro	gjà aaa	Cys	att Ile 1179	tcg Ser	tct Ser	gtg Val	Ser	gat Asp 1184	tgg Trp	ctc Leu	att Ile	Ser	atc Ile 189	4147
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	As:	n Gl	u Le	u As	n Hi	s Cy 10	s Le: 5	u Se	r Le	u Ar	g Th 11		r Le	u Va	1 G1	y Asn 115	
	tco Sei 116	с ьег	g ag u Se	t tt r Le	a gc u Al	a ga a As <sub>l</sub> 12:	p Lei	a tgi u Cy:	t gt s Va	t tg l Tr	g gc p Al 12	a Th	c ct r Le	a aa u Ly	a gg s Gl	a aat y Asn 131	558
	gct Ala 132	i Ala	tg Tr	g ca p Gl	a gaa n Gli	a caq u Gli 137	ı Leı	g aaa ı Lys	a cag	g aag n Ly:	g aa s Ly 14:	s Al	t cc a Pro	a gt: o Vai	t ca l Hi	t gta s Val 147	606
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a ne	aaa Lys 180	ьуs	Glr	a gat 1 Asp	gtt Val	ggg Gly 185	Lys	ttt Phe	gtt Val	gag Glu	g ctt Lei 190	ı Pro	a ggt > Gl <sub>y</sub>	gcg Ala	gag Glu	g atg Met 195	750
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Street Street Street	aaa Lys 244	aag Lys	gaa Glu	gat Asp	ttt Phe	gag Glu 249	aag Lys	gtt Val	atc Ile	ttg Leu	gaa Glu 254	gat Asp	gtt Val	gca Ala	atg Met	ttg Leu 259	942
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	gaa Glu	gaa Glu	atg Met	aaa Lys	aaa Lys	gly aaa	agc Ser	cag Gln	ttt Phe	ggt Gly	cag Gln	tcc Ser	tgt Cys	tgt Cys	ttg Leu	cca	1182

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gca Ala 340	гъ	a at s Il	t ga e As	c at p Me	g ag t Se 34	r Se	t aa r As	c aa n Asi	t gg n Gl	a tg y Cy 35	s Me	g ag t Ar	a ga g As	t co p Pr	a acc o Thr 355	1230
ctt Leu 356	TY	t cg r Ar	c tg g Cy	c aa s Ly	a ati s Ile 36:	∋ G1:	a cc n Pr	a cat o Hi:	t cca	a ag o Arg 36	g Th	t gg r Gl	a aa y As:	t aa n Ly	a tac s Tyr 371	1278
aat Asn 372	gtt Va]	t ta L Ty:	t cc r Pr	a aca > Thi	a tai r Tyi 377	: As	t tti p Phe	t gcd e Ala	c tgo a Cys	382	o Il	a gt e Vai	t gad l As <sub>l</sub>	c ag o Se	c atc r Ile 387	1326
gaa Glu 388	ggt Gly	gti Val	aca l Thi	a cat r His	gco Ala 393	ı Let	g aga ı Arç	a aca g Thr	aca Thr	gaa Glu 398	а Туз	c cat r His	gad S Asp	c aga	a gat g Asp 403	1374
gag Glu 404	cag Gln	ttt Phe	tao Tyi	tgg Trp	att Ile 409	: I1e	gaa Glu	a gct ı Ala	tta Leu	ggo Gly 414	r Il€	a aga e Arg	a aaa g Lys	cca Pro	tat Tyr 419	1422
att Ile 420	tgg Trp	gaa	tatı Tyr	agt Ser	cgg Arg 425	cta Leu	aat Asn	ctc Leu	aac Asn	aac Asn 430	Thr	gtg Val	g cta . Leu	tco Ser	aaa Lys 435	1470
aga Arg 436	aaa Lys	cto Leu	aca Thr	tgg Trp	ttt Phe 441	gtc Val	aat Asn	gaa Glu	gga Gly	cta Leu 446	gta Val	gat Asp	gga Gly	tgg Trp	gat Asp 451	1518
gac Asp 452	cca Pro	aga Arg	ttt Phe	cct Pro	acg Thr 457	gtt Val	cgt Arg	ggt Gly	gta Val	ctg Leu 462	aga Arg	aga Arg	Gly aaa	atg Met	aca Thr 467	1566
gtt Val 468	gaa Glu	gga Gly	ctg Leu	aaa Lys	cag Gln 473	ttt Phe	att Ile	gct Ala	gct Ala	cag Gln 478	gly	tcc Ser	tca Ser	cgt Arg	tca Ser 483	1614
gtc y Val 484	gtg Val	aac Asn	atg Met	gag Glu	tgg Trp 489	gac Asp	aaa Lys	atc Ile	tgg Trp	gcg Ala 494	ttt Phe	aac Asn	aaa Lys	aag Lys	gtt Val 499	1662
att o Ile 2 500	gac Asp	cca Pro	gtg Val	gct Ala	cca Pro 505	cga Arg	tat Tyr	gtt Val	gca Ala	tta Leu 510	ctg Leu	aag Lys	aaa Lys	gaa Glu	gtg Val 515	1710
atc o Ile I 516	cca Pro	gtg Val	aat Asn	gta Val	cct Pro 521	gaa Glu	gct Ala	cag Gln	gag Glu	gag Glu 526	atg Met	aaa Lys	gaa Glu	gta Val	gcc Ala 531	1758
aaa c Lys H 532	cac His	cca Pro	aag Lys	aat Asn	cct Pro 537	gag Glu	gtt Val	ggc Gly	ttg Leu	aag Lys 542	cct Pro	gtg Val	tgg Trp	tat Tyr	agt Ser 547	1806
ccc a Pro I 548	ıys 'ys	gtt Val	ttc Phe	тте	gaa Glu 553	ggt Gly	gct Ala	gat Asp	Ala	gag Glu 558	act Thr	ttt Phe	tcg Ser	gag Glu	ggt Gly 563	1854

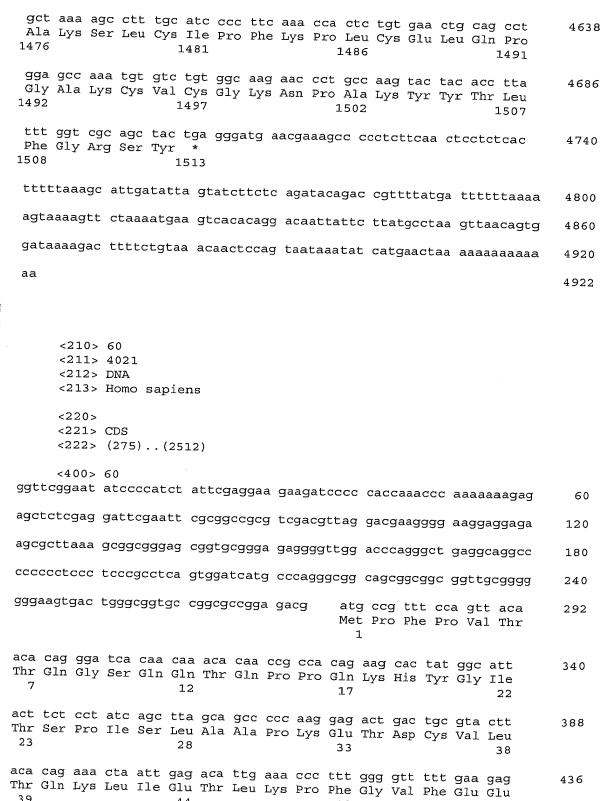
gac	ı ato	a at	t ac	a ++-	t at:	a aa.	- +~	~ ~~									
Glu 564	ı Mei	t Va	1 Th	r Ph	e Ile 569	e Ası	n Tr	p Gly	y As:	n Le	u As	c at n Il	t ac e Th	a aa r Ly	a ata s Ile 579		1902
cac His 580	гА	a aa s Asi	t gc	a gat a Asp	585 585	у Гу	a ato	c ata e Ile	a tc e Se:	t ct r Le 59	u As	t gc p Al	a aag a Ly	g tt s Le	g aat u Asn 595		1950
ttg Leu 596	GIL	a aad 1 Asi	c aaa n Lys	a gad s Asp	tac Tyr 601	: ГА	g aaa s Lys	a acc	c act	c aag c Lys 606	s Va	c ac	t tgg r Trj	g ct p Le	t gca u Ala 611		1998
gag Glu 612	act Thr	aca Thi	a cat	gct Ala	ctt Leu 617	ı Pro	att Ile	cca Pro	gta Val	a ato 1 Ile 622	е Суя	t gto	c act l Thi	tai Tyi	gag Glu 627		2046
cac His 628	ttg Leu	r ato Ile	aca Thr	aag Lys	cca Pro 633	Val	cta Leu	ı gga ı Gly	aaa Lys	gac Asp 638	Gli	g gad ı Ası	ttt Phe	aaq Lys	g cag Gln 643		2094
tat Tyr 644	gtc Val	aac Asn	: aaçı Lys	aac Asn	agt Ser 649	Lys	cat His	gaa Glu	gag Glu	cta Leu 654	ı Met	g cta Leu	a ggg a Gly	gat Asp	ccc Pro 659		2142
tgc Cys 660	ctt Leu	aag Lys	gat Asp	ttg Leu	aaa Lys 665	aaa Lys	gga Gly	gat Asp	att Ile	ata Ile 670	Gln	cto Lev	cag Gln	aga Arg	aga Arg 675		2190
gga Gly 676	ttc Phe	ttc Phe	ata Ile	tgt Cys	gat Asp 681	caa Gln	cct Pro	tat Tyr	gaa Glu	cct Pro 686	Val	ago Ser	cca Pro	tat Tyr	agt Ser 691		2238
tgc Cys 692	aag Lys	gaa Glu	gcc Ala	ccg Pro	tgt Cys 697	gtt Val	ttg Leu	ata Ile	tac Tyr	att Ile 702	cct Pro	gat Asp	gly aaa	cac His	aca Thr 707		2286
aag Lys 708	gaa Glu	atg Met	cca Pro	aca Thr	tca Ser 713	G1A 333	tca Ser	aag Lys	gaa Glu	aag Lys 718	acc Thr	aaa Lys	gta Val	gaa Glu	gcc Ala 723	:	2334
aca Thr 724	aaa Lys	aat Asn	gag Glu	acc Thr	tct Ser 729	gct Ala	cct Pro	ttt Phe	aag Lys	gaa Glu 734	aga Arg	cca Pro	aca Thr	cct Pro	tct Ser 739	:	2382
ctg Leu 740	aat Asn	aat Asn	aat Asn	tgt Cys	act Thr 745	aca Thr	tct Ser	gag Glu	gat Asp	tcc Ser 750	ttg Leu	gtc Val	ctt Leu	tac Tyr	aat Asn 755	2	2430
aga Arg 756	gtg Val	gct Ala	gtt Val	caa Gln	gga Gly 761	gat Asp	gtg Val	gtt Val	cgt Arg	gaa Glu 766	tta Leu	aaa Lys	gcc Ala	aag Lys	aaa Lys 771	2	2478
gca d Ala 1 772	cca Pro	aag Lys	gaa Glu	Asp	gta Val 777	gat Asp	gca Ala	gct Ala	gta Val	aaa Lys 782	cag Gln	ctt Leu	ttg Leu	tct Ser	ttg Leu 787	2	2526

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	аа Ly 78	S AL	t ga .a Gi	aa t Lu T	at a yr I	ys C	ag lu '93	aaa Lys	ac Th:	t gg r Gl	у G:	ln (	gaa Glu 798	Ту	t aa r Ly	a co s Pr	et g	ga ly	aac Asn 803		2574
	cc Pr	OPL	t go	ct g .a G	aa a lu I	те с	ga ly 09	cag Gln	aat Ası	t at	t to e Se	er S	tct Ser 314	aat Asr	tc 1 Se	c to r Se	a g r A	ca la	agt Ser 819		2622
	at: 116 820	= пе	g ga u Gl	ia ag u Se	gt a er L	ys S	ct er 25	ctg Leu	tat Tyr	ga: Asj	t ga p Gl	.u \	gtt /al 830	gct Ala	gc. Ala	a ca a Gl	a g n G	ly gg	gag Glu 835		2670
	gtg Val 836	L va	t cg l Ar	t aa g Ly	ag c /s L	ta a eu L 8	aa ys 41	gct Ala	gaa Glu	aaa Lys	a to s Se	r F	cct Pro 146	aag Lys	gci Ala	t aa a Ly	a a s I	ta le	aat Asn 851		2718
	gaa Glu 852	LAT	t gt a Va	a ga 1 G]	a to .u Cy	gc t /s L 8:	ta eu 57	ctg Leu	tcc Ser	cto Leu	ј аа 1 Бу	s A	ct la 62	cag Gln	tat Tyr	aa Ly	a ga s GI	aa Lu	aaa Lys 867		2766
	act Thr 868	GT	g aa 7 Ly	g ga s Gl	ig ta .u Ty	ac at /r II 8	Le .	cct Pro	ggt Gly	cag Gln	g cc Pr	o P	ca ro 78	tta Leu	tct Ser	caa Gli	a ag n Se	gt	tcg Ser 883		2814
	gat Asp 884	261	age Se:	c cc r Pr	a ac	c ag ir Ai 88	g	aat Asn	tct Ser	gaa Glu	. cc	o A	ct la 94	ggt Gly	tta Leu	gaa Glu	a ac ı Th	ır	cca Pro 899		2862
	gaa Glu 900	gc <u>c</u> Ala	aaa Lys	a gt 8 Va	a ct l Le	t tt u Ph 90	e A	gac Asp	aaa Lys	gta Val	gct Ala	a Se	ct er (	caa Gln	gly aaa	gaa Glu	a gt ı Va	1	gtt Val 915		2910
	cgg Arg 916	aaa Lys	ctt Leu	aa Ly	a ac s Th	t ga r Gl 92	u I	aaa Lys	gcc Ala	cct Pro	aag Lys	9 ga 8 As 92	gp (	caa Gln	gta Val	gat Asp	at Il	e i	gct Ala 931		2958
	gtt Val 932	caa Gln	gaa Glu	cto Le	c ct Le	t ca u Gl 93	n L	cta Leu	aag Lys	gca Ala	cag Gln	ta Ty 94	r I	aag Lys	tct Ser	ttg Leu	at.	e (	gga Gly 947		3006
	gta Val 948	gag Glu	tat Tyr	aag Lys	g cc Pro	t gt Va 95	I S	cg g Ser i	gcc Ala	act Thr	gga Gly	gc Al 95	.a 0	gag 3lu	gac Asp	aaa Lys	ga Asj	j I	aag Se3	:	3054
	aag Lys 964	aag Lys	aaa Lys	aaa Lys	aaa Lys	a aa E Ly: 96:	s L	aa a ys I	aaa Lys	tct Ser	gaa Glu	аа Ьу 97	s G	ag 31n	aat Asn	aag Lys	cct Pro	G	ag In 179	3	3102
	aaa Lys 980	caa Gln	aat Asn	gat Asp	Gl <sup>y</sup>	caa Glr 985	1 A:	gg a rg I	aaa Jys	gac Asp	cct Pro	tc Se 99	r L	aa ys .	aac Asn	caa Gln	gga	G	gt ly 95	3	3150
	996 Gly 999	ctc Leu	tca Ser	tca Ser	agt Ser	gga Gl <sub>y</sub> 1001	A.	ca g la G	ga g	gaa Glu	Gly	cag Gli	n G	ly :	cct Pro	aag Lys	Lys	. G	ln	3	198
•	acc	agg	ttg	ggt	ctt	gaç	go	ca a	aa a	aaa	gaa	gaa	a a	at d	ctt	gct	gat	t	<b>a</b> a	3	246

	Th 101	r Ar 2	g Le	u Gl	y Le	ı Glı 101	u Al	а Ly	s Ly	s Gl	u Gl 102		n Le	u Al	a As	p Trp 1027	
	ta Ty: 102	ı se	t ca r Gl:	g gt n Va	c ato	c aca Thi	г Гу:	g tca s Sei	a gaa r Gli	a at u Me	g at t Il	e Gl	a ta u Ty	c ca r Hi	t ga s As	c ata p Ile 1043	3294
	ag Se: 104	r GT	c tg y Cy	t tai	t att r Ile	ctt Let 1049	ı Arç	cco Pro	c tgg	g gc	c tai a Ty: 1054	r Al	c at a Il	t tg e Tr	g ga p Gl	a gcc u Ala 1059	3342
	ato Ile 1060	: n\;	g gad s Asp	c ttt p Phe	ttt Phe	gat Asp 1065	) Ala	gag Glu	g ato u Ile	aaq Lys	g aaa 5 Lys 1070	s Lei	t gg u Gl	t gt y Va	t gaa l Gli	a aac ı Asn 1075	3390
	tgd Cys 1076	ь тат	tto Phe	ccc Pro	atg Met	ttt Phe 1081	· val	ser	caa Gln	ı agt ı Ser	gca Ala 1086	ı Leı	a gaq ı Glı	g aaa u Lys	a gaç s Glı	g aag Lys 1091	3438
# of	act Thr 1092	HIE	gtt Val	gct Ala	ı Asp	ttt Phe 1097	Ala	cca Pro	gag Glu	gtt Val	gct Ala	Trp	g gtt Val	aca l Thi	a aga Arg	tct Ser 1107	3486
Hole Mile Cont. State	ggc Gly 1108	гÀг	acc Thr	gag Glu	Leu	gca Ala 1113	gaa Glu	cca Pro	att Ile	Ala	att Ile 1118	Arg	cct Pro	act Thr	agt Ser	gaa Glu 1123	3534
may was need	aca Thr 1124	val	atg Met	tat Tyr	cct Pro	gca Ala 1129	tat Tyr	gca Ala	aaa Lys	$\operatorname{Trp}$	gta Val 1134	cag Gln	tca Ser	cac His	Arg	gac Asp 1139	3582
The Arm 4 mag 40	ctg Leu 1140	ccc Pro	atc Ile	aag Lys	ctc Leu	aat Asn 1145	cag Gln	tgg Trp	tgc Cys	Asn	gtg Val 1150	gtg Val	cgt Arg	tgg Trp	Glu	ttc Phe 1155	3630
And And And	aag Lys 1156	cat His	cct Pro	cag Gln	cct Pro	ttc Phe .161	cta Leu	cgt Arg	act Thr	Arg	gaa Glu 1166	ttt Phe	ctt Leu	tgg Trp	Gln	gaa Glu 1171	3678
	999 Gly 1172	cac His	agt Ser	gct Ala	ttt Phe	gct Ala 177	acc Thr	atg Met	gaa Glu	Glu	gca Ala 1182	gcg Ala	gaa Glu	gag Glu	Val	ttg Leu l187	3726
	cag Gln 1188	ata Ile	ctt Leu	gac Asp	tta Leu 1	tat Tyr 193	gct Ala	cag Gln	gta Val	Tyr	gaa Glu 198	gaa Glu	ctc Leu	ctg Leu	Ala	att Ile .203	3774
	cct Pro 1204	gtt Val	gtt Val	aaa Lys	gga Gly 1	aga Arg 209	aag Lys	acg Thr	gaa Glu	Lys	gaa Glu 214	aaa Lys	ttt Phe	gca Ala	Gly	gga Gly 219	3822
	gac Asp 1220	tat Tyr	aca Thr	act Thr	aca Thr	ata Ile 225	gaa Glu	gca Ala	ttt Phe	Ile	tct Ser 230	gct Ala	agt Ser	gga Gly	Arg	gct Ala 235	3870
	atc Ile	cag Gln	gga Gly	gga Gly	aca i	tca ( Ser 1	cat (	cat His :	tta : Leu (	gly aaa	cag Gln	aat Asn	ttt Phe	tcc Ser	222	ata	3918

	1236	5				124	1				124	6				1251	
	ttt Phe 1252	: GI	a at u Il	c gt e Va	t tt l Ph	t gaa e Gli 125'	u Asj	t cca p Pro	a aag o Lyg	g at s Il	a cc e Pr 126	o Gl	a gag y Gli	g aag u Ly	g ca s Gl:	a ttt n Phe 1267	3966
	gcc Ala 1268	ту:	t caa r Gli	a aa n Ası	c tco n Sei	tgg Try	o Gly	c ct <u>c</u> / Leu	g aca	a ac Th	t cg r Ar 127	g Th:	t at: r Ile	t ggi e Gly	t gt y Vai	t atg l Met 1283	4014
	acc Thr 1284	Met	g gti C Vai	t cat l His	t ggg	g gad 7 Asp 1289	) Asr	atg Met	ggt Gly	tta Lei	a gta u Vai 129	l Leı	a cca ı Pro	a cco	c cgt o Arg	gta Val 1299	4062
	gca Ala 1300	Cys	gtt Val	cag L Glr	g gtg n Val	gto Val	. Ile	att Ile	cct Pro	tgt Cys	gg( G Gl <sub>y</sub> 131(	y Ile	aco Thr	aat Asr	gca n Ala	ctt Leu 1315	4110
41	1316	gaa Glu	ı gaa ı Glu	ı gacı ı Asp	aaa Lys	gaa Glu 1321	Ala	ctg Leu	att	gca Ala	a aaa a Lys 1326	в Сув	aat Asn	gat Asp	tat Tyr	cga Arg 1331	4158
	agg	cga Arg	tta Leu	cto Leu	Ser	gtt Val 1337	Asn	atc Ile	cgc Arg	gtt Val	aga Arg 1342	g Ala	gat Asp	tta Leu	cga Arg	gat Asp 1347	4206
	aat Asn 1348	tat Tyr	tct Ser	cca Pro	GIA	tgg Trp 1353	aaa Lys	ttc Phe	aat Asn	cac His	tgg Trp 1358	gag Glu	ctc Leu	aag Lys	Gly	gtt Val 1363	4254
	ccc Pro 1364	att Ile	aga Arg	ctt Leu	Glu	gtt Val 1369	gl <sup>y</sup> aaa	cca Pro	cgt Arg	Asp	atg Met 1374	aag Lys	agc Ser	tgt Cys	Gln	ttt Phe 1379	4302
	gta Val 1380	gcc Ala	gtc Val	aga Arg	Arg	gat Asp L385	act Thr	gga Gly	gaa Glu	Lys	ctg Leu 1390	aca Thr	gtt Val	gct Ala	Glu	aat Asn 1395	4350
201	gag Glu 1396	gca Ala	gag Glu	act Thr	гЛs	ctt Leu 401	caa Gln	gct Ala	att Ile	Leu	gaa Glu 1406	gac Asp	atc Ile	cag Gln	Val	acc Thr 1411	4398
	ctt Leu 1412	ttc Phe	aca Thr	agg Arg	Ala	tct Ser 417	gaa Glu	gac Asp	ctt Leu	Lys	act Thr l422	cat His	atg Met	gtt Val	Val	gct Ala 427	4446
	aat Asn 1428	aca Thr	atg Met	gaa Glu	Asp	ttt Phe 433	cag Gln	aag Lys	ata Ile	Leu	gat Asp .438	tct Ser	gga Gly	aag Lys	Ile	gtt Val .443	4494
	cag a Gln : 1444	att Ile	cca Pro	ttc Phe	Суѕ	999 Gly 449	gaa Glu	att (	gac Asp	Cys	gag Glu 454	gac Asp	tgg Trp	atc Ile	Lys	aag Lys 459	4542
	acc a Thr 5	act Thr	gcc Ala	agg Arg	Asp	caa Gln 465	gat Asp	ctt ( Leu (	gaa Glu	Pro	ggt Gly 470	gct Ala	cca Pro	tcc Ser	Met	gga Gly 475	4590

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	gaa Glu 5!	1 GT	g ga u Gl	a ct u Le	g caq u Gli	g cgo n Aro	g Arg	g att g Ile	tta E Lei	a ati	t ttg E Lei 6	a Gly	a aaa y Ly:	a cta s Lei	a aa ı As:	t aac n Asn 70	484
	cto Let 7:	ı Va.	a aa l Ly	a gag s Gli	g tgg u Tr <u>p</u>	g ata o Ile 76	e Arc	a gaa g Glu	a ato	agt Sei	gaa Glu 81	ı Sei	c aag	g aat 5 Asr	ct Lei	t cca u Pro 86	532
	caa Glr 87	ı Sei	gt. Va	a atı l Ile	t gaa e Glu	aat Asr 92	ı Val	: gga : Gly	gga Gl <sub>y</sub>	aaa Lys	att Ile 97	Phe	aca Thr	ttt Phe	e Gly	tct Ser 102	580
	tac Tyr 103	. Arc	tt: J Le:	a gga ı Gly	a gtg ⁄Val	cat His 108	Thr	aaa Lys	ggt	gct Ala	gat Asp 113	Ile	gat Asp	gcg Ala	ttg Lei	tgt Cys 118	628
	gtt Val 119	Ala	cca Pro	a aga o Arg	cat His	gtt Val 124	Asp	cga Arg	agt Ser	gac Asp	ttt Phe 129	Phe	acc Thr	tca Ser	tto Phe	tat Tyr 134	676
The state of the s	gat Asp 135	aag Lys	ttg Lei	aaa Lys	tta Leu	cag Gln 140	gaa Glu	gaa Glu	gta Val	aaa Lys	gat Asp 145	Leu	aga Arg	gct Ala	gtt Val	gaa Glu 150	724
W. C. L. L. H.	gag Glu 151	gca Ala	ttc Phe	gta Val	cca Pro	gtt Val 156	att Ile	aaa Lys	ctc Leu	tgt Cys	ttt Phe 161	Asp	gly aaa	ata Ile	gag Glu	att Ile 166	772
dum Their access	gat Asp 167	att Ile	ttg Leu	ttt Phe	gca Ala	aga Arg 172	tta Leu	gca Ala	ctg Leu	cag Gln	aca Thr 177	att Ile	cct Pro	gaa Glu	gat Asp	ttg Leu 182	820
Marie Assail Marie Elli	gat Asp 183	cta Leu	cga Arg	gat Asp	gac Asp	agt Ser 188	ctg Leu	cta Leu	aaa Lys	aat Asn	tta Leu 193	gat Asp	ata Ile	aga Arg	tgt Cys	ata Ile 198	868
abd.	aga Arg 199	agt Ser	ctt Leu	aac Asn	ggt Gly	tgc Cys 204	agg Arg	gta Val	acc Thr	gat Asp	gaa Glu 209	att Ile	tta Leu	cat His	cta Leu	gta Val 214	916
	cca Pro 215	aac Asn	att Ile	gac Asp	aac Asn	ttc Phe 220	agg Arg	tta Leu	act Thr	ctg Leu	aga Arg 225	gct Ala	atc Ile	aaa Lys	cta Leu	tgg Trp 230	964
	gcc Ala 231	aaa Lys	cgc Arg	cac His	aac Asn	atc Ile 236	tat Tyr	tcc Ser	aat Asn	ata Ile	tta Leu 241	ggt Gly	ttc Phe	ctc Leu	ggt Gly	ggt Gly 246	1012
	gtt Val 247	tcc Ser	tgg Trp	gct Ala	atg Met	cta Leu 252	gta Val	gca Ala	aga Arg	act Thr	tgc Cys 257	cag Gln	ctt Leu	tat Tyr	cca Pro	aat Asn 262	1060
	gca Ala 263	ata Ile	gca Ala	tca Ser	Thr	ctt Leu 268	gta Val	cat His	aaa Lys	Phe	ttc Phe 273	ttg Leu	gta Val	ttt Phe	tct Ser	aaa Lys 278	1108

taa aa	2 +cc	aaa -												
tgg ga Trp Gl 279	u Trp	Pro A	at cc sn Pr 28	o Val	g cta Leu	ı ttg ı Lev	g aaa u Lys	a cag Glr 289	ı Pro	t gaa	a gaa u Gli	a tg u Cy	c aat s Asn 294	1156
ctt aa Leu As 295	t ttg n Leu	cct g Pro V	ta tg al Tr 30	p Asp	cca Pro	agg Arg	gta Val	aac Asr 305	ı Pro	c agt Sei	gat Asp	t ag O Ar	g tac g Tyr 310	1204
cat ct His Le <sup>r</sup> 311	t atg u Met	cct a Pro I	ta at le Il 31	e Thr	cca Pro	gca Ala	tac Tyr	cca Pro	Glr	a cag n Glr	g aad 1 Asr	c tc 1 Se	c acg r Thr 326	1252
tac aat Tyr Asi 327	t gtg n Val	tcc g Ser Va	at toa al Sen 332	r Thr	cgg Arg	atg Met	gtc Val	atg Met 337	Val	gag Glu	gag Glu	tt Ph	t aaa e Lys 342	1300
caa ggt Gln Gl <sub>y</sub> 343	ctt / Leu	gct at Ala Il	c aca e Thi	qaA :	gaa Glu	att Ile	ttg Leu	ctg Leu 353	agt Ser	aag Lys	gca Ala	gaç Gl	g tgg ı Trp 358	1348
tcc aaa Ser Lys 359	ctt : Leu l	ttt ga Phe Gl	a gct u Ala 364	Pro	aac Asn	ttc Phe	ttt Phe	caa Gln 369	aag Lys	tac Tyr	aag Lys	cat	tat Tyr 374	1396
att gta Ile Val 375	ctt o	cta go Leu Al	a agt a Ser 380	Ala	cca Pro	aca Thr	gaa Glu	aaa Lys 385	caa Gln	cgc Arg	ctg Leu	ga <i>a</i> Glu	tgg Trp 390	1444
gtg ggc Val Gly 391	ttg g Leu V	gtg ga Val Gl	a tca u Ser 396	aaa Lys	atc Ile	cga Arg	atc Ile	ctg Leu 401	gtt Val	gga Gly	agc Ser	ttg Leu	gag Glu 406	1492
aag aat Lys Asn 407	gaa t Glu F	tt at he Il	t aca e Thr 412	ctg Leu	gct Ala	cat His	Val	aat Asn 417	ccc Pro	cag Gln	tca Ser	ttt Phe	cca Pro 422	1540
gca ccc Ala Pro 423	aaa g Lys G	aa aat lu Ası	ccc Pro 428	gac Asp	aag (	gaa ( Glu (	Glu	ttt Phe 433	cgc Arg	acg Thr	atg Met	tgg Trp	gtg Val 438	1588
att ggg Ile Gly 439	tta g Leu V	tg ttt al Phe	aaa Lys 444	aaa Lys '	aca q Thr (	gaa a Glu <i>i</i>	Asn :	tct Ser 449	gaa Glu	aac Asn	ctc Leu	agt Ser	gtt Val 454	1636
gat ctc Asp Leu 455	acc to	at gat yr Asp	att Ile 460	cag d Gln s	tct t Ser E	tc a Phe T	Chr A	gat Asp ' 465	aca Thr	gtt Val	tat Tyr	agg Arg	caa Gln 470	1684
gca ata Ala Ile 471	aac ag Asn Se	gc aag er Lys	atg Met 476	ttt o	gag g Blu V	gtg g Val A	ap N	atg a Met 1 181	aaa ( Lys )	att d	gct Ala	gca Ala	atg Met 486	1732
cat gta His Val 487	aaa aq Lys Ar	ga aag g Lys	caa Gln 492	ctc c Leu H	at c Iis G	aa c	eu I	ta d eu I	cct a Pro <i>l</i>	aat d Asn I	cat q His '	Val	ctt Leu 502	1780
cag aaa	aaa aa	a aag	cat	tca a	.ca g	aa g	gt g	ıtc a	aaa t	tg a	aca ç	gct	ctc	1828

Glr 503	ı Ly	s Ly	s Ly	s Ly	s Hi 50	.s Se 8	r Th	r Gl	u Gl	y Va 51		rs Le	u Th	r Al	a Leu 518	
aat Asr 519	I AS	c ag o Se	c ag r Se	c ct r Le	c ga u As 52	р Le	g tc u Se	t at r Me	g ga t As	c ag p Se 52	r As	t aa p As	c ag n Se	c at r Me	g tct t Ser 534	1876
gtg Val 535	. Pro	tc Se	a cc r Pr	t ac	t ag r Se 54	r Al	t ac	g aag r Ly	g ac	c ag r Se: 54!	r Pr	a tt o Le	g aa u Asi	c ag n Se	t tct r Ser 550	1924
ggc Gly 551	ser	tci Se:	t cag r Gl:	n Gli	c ag y Ar 55	g Ası	c agi	t cct r Pro	t gc	t cca a Pro 56:	o Al	t gta	a aca l Thi	a gc	a gca a Ala 566	1972
tct Ser 567	vaı	g aco	c aac Asi	c ata n Ile	a cag e Gli 572	n Ala	act Thi	gaa Glu	a gtt ı Val	t tot L Ser 577	· Val	g cca l Pro	a caa o Glr	a gta 1 Va:	a aat l Asn 582	2020
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ctc ( Leu I	ect (	gca Ala	aat Asn	cct Pro	att Ile	cct Pro	gtt Val	atc Ile	aag Lys	aat Asn	tca Ser	ata Ile	aaa Lys	ctg Leu	aga Arg	2500

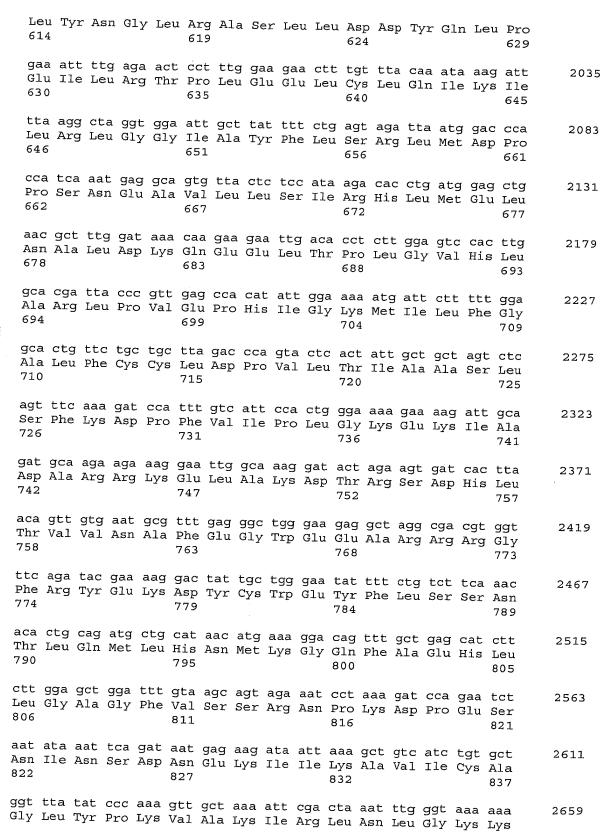
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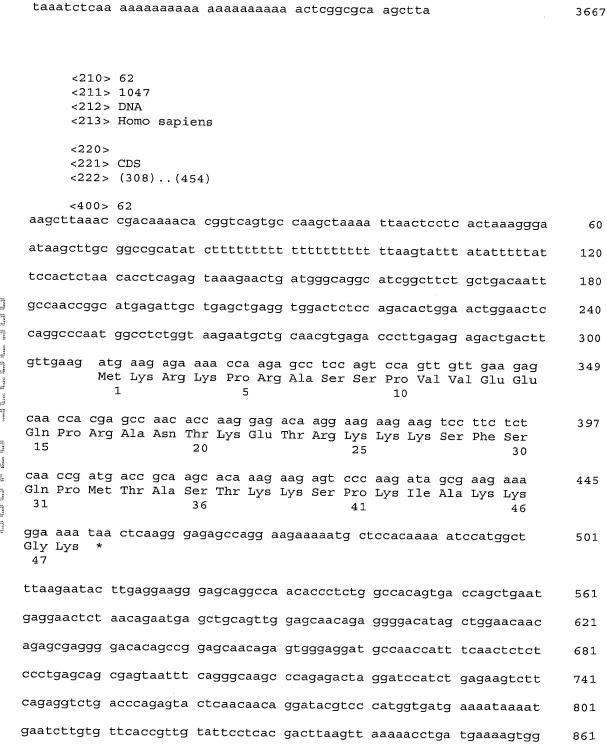
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caa Gln 182	ггъ	tt: Le:	a ttg u Lei	g gaa u Gli	a gat u Asp 187	) Lei	a caa 1 Glr	a aag n Lys	g aaa s Lya	a aaa s Ly: 192	s As:	t ga n Asj	c cti p Lei	t cg u Ar	g tat g Tyr 197	691
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gtg Val 566	ata Ile	gat Asp	gga Gly	gga Gly	aaa Lys 571	I	ta a le 1	aaa Lys	gag Glu	acq Thi	r E	at Iis 576	ttt Phe	gat Asp	a o T	ict 'hr	cag Gln	aa As	sn	1843
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cag Gln 598	aga Arg	aaa Lys	ggt Gly	cga Arg	gct Ala 603	g:	ga a ly A	aga Arg	gtt Val	ca <i>a</i> Gln	ı P	ct ro 08	ggt Gly	cat His	t	λa . dc .	tat Tyr	ca Hi 61	ន	1939
ctg	tat	aat	ggt	ctt	aga	go	ca a	ıgt (	ctt	cta	g	at 🤉	gac	tat	C	aa d	ctg	CC	a	1987



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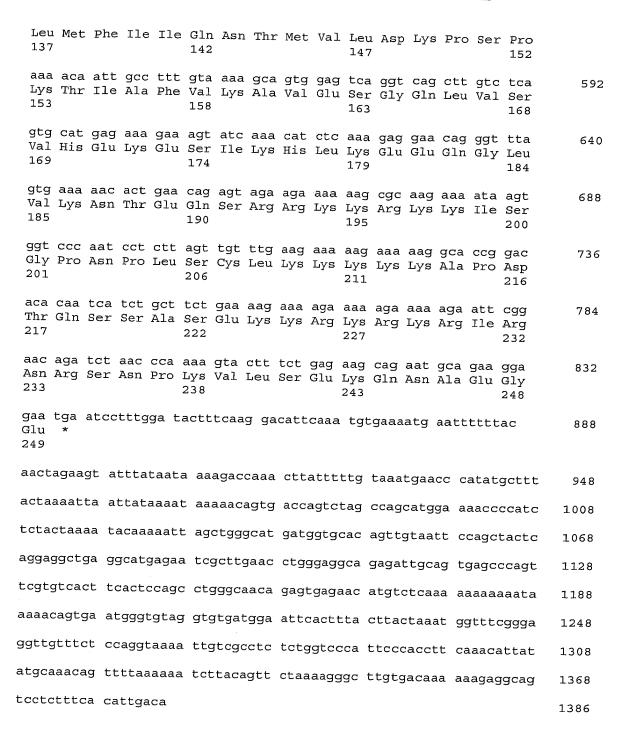
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State State State State	ccg Pro 25	tac Tyr	cac Glr	g ato 1 Ile	ctg Leu	ctg Leu 30	. Asp	ggc	acc Thr	ttc Phe	tgt Cys 35	Gln	gcg Ala	gcg Ala	ctg Leu	cgg Arg 40	208
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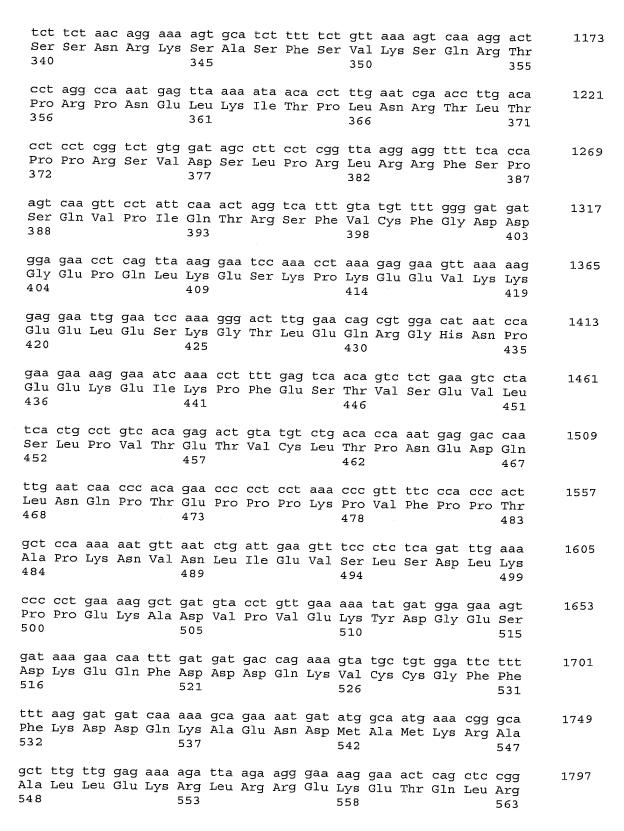
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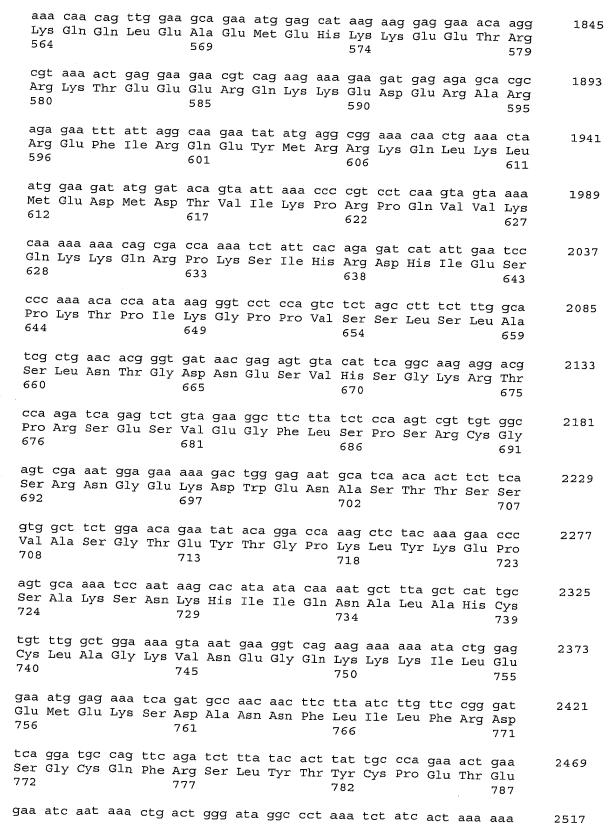
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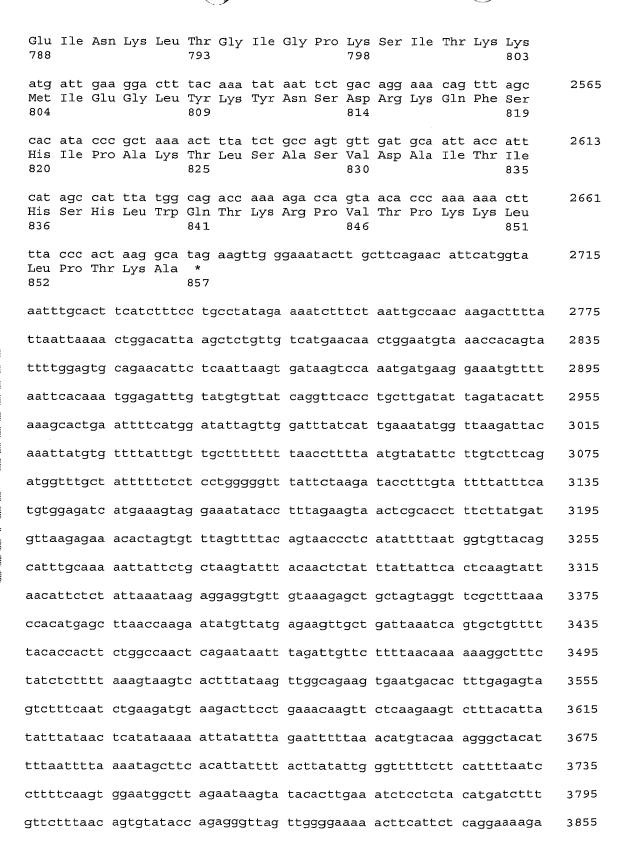
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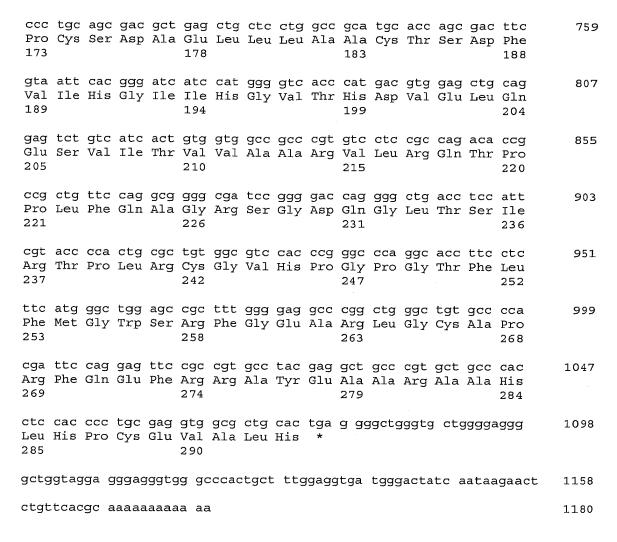
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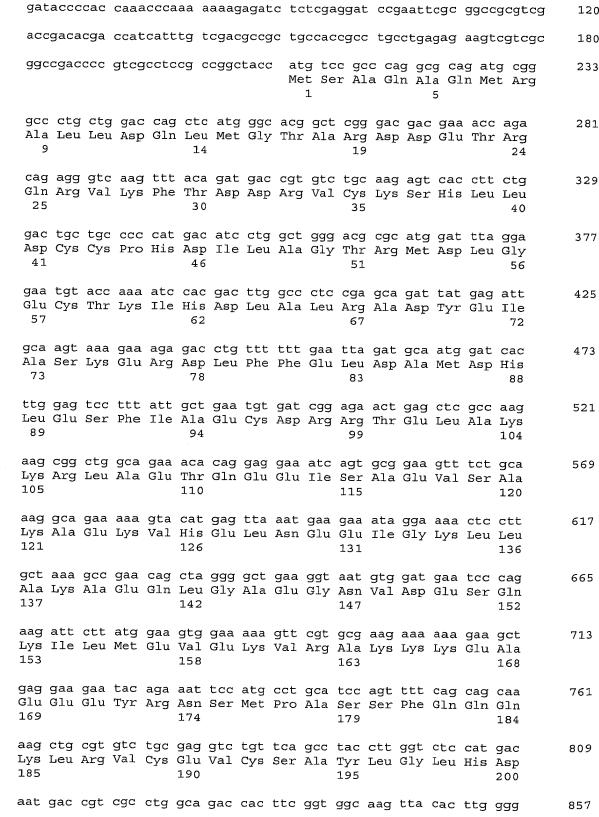


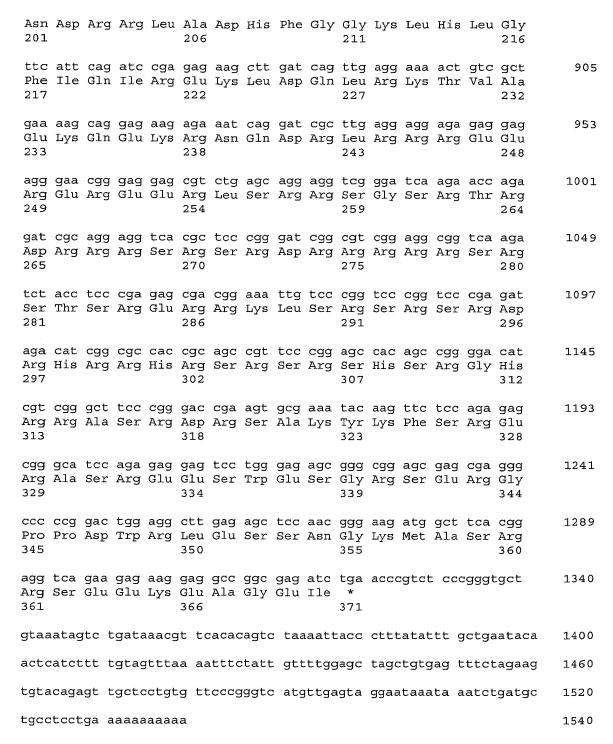
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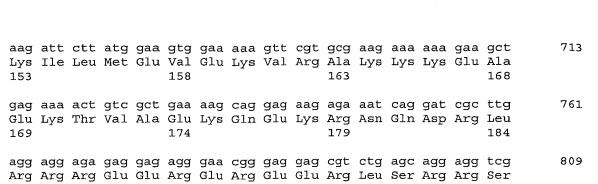




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233 243 248

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His Ser Arg Gly His Arg Arg Ala Ser Arg Asp Arg Ser Ala Lys Tyr

249

259

264

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Hall Roll Ball	cag Gln 569	cag Gln	cg Ar	g a g T	.cg hr	cca Pro	ctg Leu 574	1,16	g g t G	ag lu	gcc Ala	gto Va]	r A	tg al	aac Asn	aa Ası	C Ca	ac is	ctg Leu	G.	ag lu 84	1781	
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	gag Glu 601	gac Asp	gg <sup>†</sup>	t to y Se	cc . er '	acc Thr	tgc Cys 606	cto	C Ca	ac d is F	cac His	gca Ala	. A.	cc a la 1 11	aaa Lys	ato Ile	gg G1	g a	aac Asn	tt Le	eu	1877	
	gag Glu 617	atg Met	gto Val	ag L Se	gc ( er 1	ctg Leu	ctg Leu 622	ctg	ag Se	gc a er T	ca (	gga Gly	G3 G2	ln V	gtg /al	gac Asp	gt Va	c a l Æ	aac Asn	gc Al 63	a	1925	
	cag Gln 633	gac Asp	agt Ser	gg Gl	.y c	этУ	tgg Trp 638	acg Thr	CC Pr	cc a	tc a	atc Ile	tç Tr	cp P	jct la	gca Ala	ga Gl	g c u H	lis	аа Ly 64	ន	1973	
	cac His	atc Ile	gag Glu	gt. Va	g a l I	tc le i	cgc Arg	atg Met	ct Le	a c	tg a eu 1	acg Thr	cg Ar	.g G	gc 1y	gcc Ala	gad Asp	c g	tc al	ac Th:	c r	2021	

64	9				65	4				65	9				664	
cto Lev 66!	a in	t ga r As	c aa p As	c ga n Gl	g ga u Gl 67	u As	c at n Il	c tg e Cy	c ct s Le	g ca u Hi 67	s Tr	p Al	cc to la Se	cc tt er Pł	c acg ne Thr 680	2069
681 GJ <sup>7</sup> GG	/ Se	c gc r Al	c gc a Al	c at a Il	c gc e Al 68	a Gl	a gt u Va	c ct l Le	t ct u Le	g aa u As: 69	n Al	g cg a Ar	jc tg g Cy	jt ga 's As	c ctc p Leu 696	2117
cat His 697	AT9	t gt a Va	c aa l As	c ta n Ty:	c ca r Hi 70:	s Gly	g ga / As <sub>l</sub>	c ace p Thi	c cc r Pr	c ctg D Lei 70'	ı Hi	c at s Il	c go e Al	a go a Al	t cgg a Arg 712	2165
gag Glu 713	ı sei	tac Ty:	c car r Hi	t gad s Asj	c tgo Cys 718	s Val	g cto Lei	g tta u Lew	a tto ı Pho	c cto E Lei 723	ı Se:	a cg r Ar	t gg g Gl	g gc	c aac a Asn 728	2213
cct Pro 729	GIL	g cto Lei	g cgg ı Arg	g aad g Asi	c aaa 1 Lys 734	s GIu	gl <sup>y</sup> aga	g gad / Asp	c aca	a gca Ala 739	ıTr	g ga o As	c ct	g ac u Th	t ccc r Pro 744	2261
gag Glu 745	Arg	tco Ser	gac Asp	gtg Val	tgg Trp 750	) Phe	gcg	g ctt Leu	caa Glr	ctc Leu 755	Asr	c cg	c aag g Ly	g cto s Leo	c cga 1 Arg 760	2309
ctt Leu 761	Gly ggg	gtg Val	gga Gly	aat Asn	cgg Arg 766	Ala	atc Ile	: cgc : Arg	aca Thr	gag Glu 771	Lys	g ato	c ato	c tgo	c cgg Arg 776	2357
gac Asp 777	gtg Val	gct Ala	cgg Arg	ggc	tat Tyr 782	Glu	aac Asn	gtg Val	ccc Pro	att Ile 787	ccc	tgt Cys	gto Val	aac Asr	ggt Gly 792	2405
gtg Val 793	gat Asp	gly aaa	gag Glu	ccc Pro	tgc Cys 798	cct Pro	gag Glu	gat Asp	tac Tyr	aag Lys 803	tac Tyr	atc Ile	tca Ser	gag Glu	aac Asn 808	2453
tgc Cys 809	gag Glu	acg Thr	tcc Ser	acc Thr	atg Met 814	aac Asn	atc Ile	gat Asp	cgc Arg	aac Asn 819	atc Ile	acc Thr	cac His	ctg Leu	cag Gln 824	2501
cac His 825	tgc Cys	acg Thr	tgt Cys	gtg Val	gac Asp 830	gac Asp	tgc Cys	tct Ser	agc Ser	tcc Ser 835	aac Asn	tgc Cys	ctg Leu	tgc Cys	ggc Gly 840	2549
cag Gln 841	ctc Leu	agc Ser	atc Ile	cgg Arg	tgc Cys 846	tgg Trp	tat Tyr	gac Asp	aag Lys	gat Asp 851	gly aaa	cga Arg	ttg Leu	ctc Leu	cag Gln 856	2597
gaa Glu 857	ttt Phe	aac Asn	aag Lys	att Ile	gag Glu 862	cct Pro	ccg Pro	ctg Leu	att Ile	ttc Phe 867	gag Glu	tgt Cys	aac Asn	cag Gln	gcg Ala 872	2645
tgc : Cys : 873	tca Ser	tgc Cys	tgg Trp	aga Arg	aac Asn 878	tgc Cys	aag Lys	aac Asn	Arg	gtc Val 883	gta Val	cag Gln	agt Ser	ggc Gly	atc Ile 888	2693



aag gtg cgg cta cag ctc tac cga aca gcc aag atg ggc tgg ggg gtc Lys Val Arg Leu Gln Leu Tyr Arg Thr Ala Lys Met Gly Trp Gly Val 889 894 899 904	
cgc gcc ctg cag acc atc cca cag ggg acc ttc atc tgc gag tat gtc Arg Ala Leu Gln Thr Ile Pro Gln Gly Thr Phe Ile Cys Glu Tyr Val 905 910 915	2789
ggg gag ctg atc tct gat gct gag gct gat gtg aga gag gat gat tct Gly Glu Leu Ile Ser Asp Ala Glu Ala Asp Val Arg Glu Asp Asp Ser 926 931	2837
Tyr Leu Phe Asp Leu Asp Asn Lys Asp Gly Glu Val Tyr Cys Ile Asp 937 942 947	2885
gcc cgt tac tat ggc aac atc agc cgc ctc ctc tgc cac ctg tgt gac Ala Arg Tyr Tyr Gly Asn Ile Ser Arg Leu Leu Cys His Leu Cys Asp 958 963	2933
Pro Asn Ile Ile Pro Val Arg Val Phe Met Leu His Gln Asp Leu Arg	2981
ttt cca cgc atc gcc ttc ttc agt tcc cga gac atc cgg act ggg gag Phe Pro Arg Ile Ala Phe Phe Ser Arg Asp Ile Arg Thr Gly Glu 990 995	3029
gag cta ggg ttt gac tat ggc gac cgc ttc tgg gac atc aaa agc aaa Glu Leu Gly Phe Asp Tyr Gly Asp Arg Phe Trp Asp Ile Lys Ser Lys  1001 1006	3077
Tyr Phe Thr Cys Gln Cys Gly Ser Glu Lys Cys Lys His Ser Ala Glu 1017 1022 1027	3125
gcc att gcc ctg gag cag agc cgt ctg gcc cgc ctg gac cca cac cct Ala Ile Ala Leu Glu Gln Ser Arg Leu Ala Arg Leu Asp Pro His Pro  1033 1043	3173
gag ctg ctg ccc gag ctc ggc tcc ctg ccc cct gtc aac aca tga gaa Glu Leu Leu Pro Glu Leu Gly Ser Leu Pro Pro Val Asn Thr * 1059	3221
cggaccacac cctctctccc cagcatggat ggccacagct cagccgcctc ctctgccacc	3281
agodgetege agoddatgod tgggggtgot godatottot otooggaga contitaa aa	
outcodigad dagagatodd agddaggddd tggaggtdtg adagddddd ddigagagag	3341
33ccccc cccgtggaggg caacttcagg gctggccacc ccccgtgttc cccatggtac	3401
groundstir gargaariga agtogggoot otatgocaac tggttoottt tgttotoaat	3461
addigitiggiaata aaaaaaaaa a	3521
	3552

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contrata contracts to the contract of the cont	120
	180
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gatacettte teatgetatg gaattteaag eeacatgeta gagettacag atatgtgggt	300
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acagcttctg aagacaaatc cataaaagt atg gag cat gta tcg cca gcg ctt 5 Met Glu His Val Ser Pro Ala Leu 1 5	533
cct gta ttc ctt gta tcg aca tac aca ctg ggt acg ctg tgc cca att Pro Val Phe Leu Val Ser Thr Tyr Thr Leu Gly Thr Leu Cys Pro Ile 9 14 19 24	81
tca ccc gat gga aga cta att gtg tca tgt agt gag gat aaa act att 6 Ser Pro Asp Gly Arg Leu Ile Val Ser Cys Ser Glu Asp Lys Thr Ile 25 30 35 40	29
aaa att tgg gat acc aca aat aag caa tgt gtt aat aac ttc tca gat 6 Lys Ile Trp Asp Thr Thr Asn Lys Gln Cys Val Asn Asn Phe Ser Asp 41 46 51 56	77
tcc gtt gga ttt gca aat ttt gtg gac ttt aac cct agt ggt aca tgc 7: Ser Val Gly Phe Ala Asn Phe Val Asp Phe Asn Pro Ser Gly Thr Cys 57 62 67 72	25
ata gct tca gca ggt tct gat caa act gtg aaa gtc tgg gat gta aga 7' Ile Ala Ser Ala Gly Ser Asp Gln Thr Val Lys Val Trp Asp Val Arg 73 78 83 88	73

	gtg Val 89	. Asr	c aaa n Lys	ı tta Lei	a cta ı Lei	a caç ı Glr 94	ı His	tac Tyr	c caa Glr	a gti n Val	cac His	s Sei	c ggt	gga Gly	a gti 7 Va:	t aat l Asn 104	821
	tgo Cys 105	$11\epsilon$	tca Ser	tto Phe	cat His	cct Pro	Ser	ggt Gly	aac Asn	tatı Tyı	cto Leu 115	ı Ile	aca Thi	a gct Ala	tct Sei	tca Ser 120	869
	gat Asp 121	Gly	acc Thr	ctt Leu	aag Lys	att Ile 126	Leu	gac Asp	cto Leu	tta Lev	gaa Glu 131	Gly	agg Arg	g ctc g Leu	ato Ile	tat Tyr 136	917
	aca Thr 137	Leu	caa Gln	gga Gly	cat His	acg Thr 142	Gly	cct Pro	gto Val	ttt Phe	act Thr 147	Val	tca Ser	ttt Phe	tca Ser	aaa Lys 152	965
	ggt Gly 153	Gly	gag Glu	cta Leu	ttt Phe	gca Ala 158	Ser	gga Gly	ggt Gly	gca Ala	gac Asp 163	aca Thr	cag Gln	gtc Val	tta Leu	tta Leu 168	1013
	tgg Trp 169	agg Arg	act Thr	aac Asn	ttt Phe	gat Asp 174	gaa Glu	ttg Leu	cat His	tgt Cys	aaa Lys 179	ggt Gly	ctt Leu	acc Thr	aaa Lys	aga Arg 184	1061
The first should show the second of the second seco	aat Asn 185	ctc Leu	aaa Lys	aga Arg	tta Leu	cat His 190	ttt Phe	gat Asp	tca Ser	cca Pro	cca Pro 195	cat His	ctt Leu	ctt Leu	gat Asp	atc Ile 200	1109
	tac Tyr 201	cca Pro	aga Arg	aca Thr	cca Pro	cat His 206	ccc Pro	cat His	gag Glu	gaa Glu	aaa Lys 211	gtt Val	gag Glu	act Thr	gta Val	gaa Glu 216	1157
	att Ile 217	aat Asn	cca Pro	aag Lys	ctt Leu	gag Glu 222	gta Val	atc Ile	gat Asp	ttg Leu	cag Gln 227	atc Ile	tct Ser	act Thr	ccc Pro	cct Pro 232	1205
e se e se e se	gtt Val 233	atg Met	gat Asp	atc Ile	ctt Leu	tct Ser 238	ttt Phe	gat Asp	tct Ser	acc Thr	aca Thr 243	aca Thr	aca Thr	gaa Glu	acc Thr	agt Ser 248	1253
	ggt Gly 249	Arg	act Thr	ctg Leu	cca Pro	gac Asp 254	aag Lys	ggt Gly	gaa Glu	gag Glu	gcc Ala 259	tgt Cys	gga Gly	tat Tyr	ttc Phe	ttg Leu 264	1301
	aac Asn 265	cct Pro	tcc Ser	tta Leu	atg Met	tca Ser 270	cca Pro	gaa Glu	tgt Cys	ttg Leu	cca Pro 275	aca Thr	acc Thr	acg Thr	aaa Lys	aag Lys 280	1349
	aaa Lys 281	aca Thr	gaa Glu	gac Asp	Met	agt Ser 286	gac Asp	ctc Leu	ccc Pro	tgt Cys	gaa Glu 291	agt Ser	caa Gln	agg Arg	agc Ser	ata Ile 296	1397
	cct Pro 297	ctc Leu	gct Ala	gtg Val	Thr	gat Asp 302	gct Ala	tta Leu	gag Glu	cat His	att Ile 307	atg Met	gaa Glu	caa Gln	ctc Leu	aat Asn 312	1445

gtt ttg aca cag act gtt tca atc ttg gag cag cga ctg act ttg aca Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr 313 328	1493
gag gat aag ctg aaa gac tgc ctt gaa aat cag caa aag ctt ttc agt Glu Asp Lys Leu Lys Asp Cys Leu Glu Asn Gln Gln Lys Leu Phe Ser 329 334 339 344	154]
gct gtc caa cag aaa agc tga at aaaaaattca ttttcatttg ttgggcagag Ala Val Gln Gln Lys Ser * 345 350	1594
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agaaaaggca tacctaagga ctaatttaaa cacatatcaa tgtgaaggac taatttaaat	1774
tactatcatt tatgattgca gtaataaagt gataagcatt caagcaactc tgtattttcc	1834
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ccg atg gca ctg tct att tta gat att aaa atg tca cca tct tgg tat Met Ala Leu Ser Ile Leu Asp Ile Lys Met Ser Pro Ser Trp Tyr 1 5 10	528

ttt Phe 16	cac His	atg Met	gct Ala	ata Ile	ggc Gly 21	att Ile	ata Ile	aac Asn	tgg Trp	aac Asn 26	act Thr	act Thr	gcg Ala	ggt Gly	tta Leu 31	576
tct Ser 32	ggc Gly	act Thr	ctg Leu	tat Tyr	cca Pro 37	aaa Lys	gtc Val	ccc Pro	caa Gln	aag Lys 42	tac Tyr	ata Ile	ctc Leu	ttt Phe	gac Asp 47	624
tct Ser 48	gta Val	att Ile	ctg Leu	ctt Leu	cta Leu 53	Gly ggc	atg Met	tta Leu	aga Arg	aaa Lys 58	ata Ile	cgt Arg	cag Gln	gta Val	tgc Cys 63	672
caa Gln 64	aat Asn	gta Val	tac Tyr	atg Met	aaa Lys 69	Gly aaa	tgt Cys	tca Ser	cca Pro	ata Ile 74	aca Thr	tta Leu	ttt Phe	aaa Lys	ata Ile 79	720
gtt Val 80	cac His	tac Tyr	tgg Trp	cca Pro	ggc Gly 85	gca Ala	gta Val	gct Ala	cat His	gcc Ala 90	tat Tyr	aat Asn	cct Pro	agc Ser	act Thr 95	768
ttg Leu 96	gga Gly	ggc	caa Gln	gtt Val	999 Gly 101	ggc Gly	aaa Lys	tca Ser	cct Pro	gag Glu 106	gtc Val	agg Arg	agt Ser	tcg Ser	aga Arg 111	816
cca Pro 112	gcc Ala	tgg Trp	act Thr	aca Thr	tgg Trp 117	tga *	aa c	ccca	tete	t ac	taaa	ıagaa	caa	aaat	tag	869
gtcg	acgc	gg c	cgcg	aatt	c gg	atcc	tcga	gag	atct	ctt	tttt	tggg	tt t	ggtg	gggta	929
tctt	catc	gt c	gaat	cgtt	a gt	tata	t									956
		0> 7 1> 1														
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agtt		0 > 7:		77.2.C	~ ~~	5505	7.000	<b>.</b>								
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															ctatg	120
gctga																180
cctga	ισιαί	L CI	-gcc(	-ayy(	y aga	acacā	ıyac	ccag	Đ		_	_	cac His			232
cag a Gln S	igc a Ser I	itt g	gag g Blu C	gag g Blu <i>R</i>	gct g Ala V	gtg g /al A	gct o	tg g	gta g 7al G	gaa d Blu H	cac t His T	tg (	cag a	agg g	gaa Hlu	280

7	,				12	2				17	7				22	
tct Ser 23	· Gly	caa Glr	aca Thr	tgg Tr	g aat o Asr 28	ı Gly	g gtt Va]	gca L Ala	gto Val	cat His	: Glu	g ctg ı Lev	r Gl <sup>7</sup>	a aag ⁄ Lys	g gag Glu 38	328
gca Ala 39	Val	g cto . Lev	tto Leu	r Glž	a gaa / Glu 44	Thr	gca Ala	ı gaç ı Glu	Ala Ala	tca Ser 49	Ser	tto Phe	ggs gly	r Lev	j aag Lys 54	376
cca Pro 55	Thr	gag Glu	ser	caa Glr	a cca n Pro 60	Val	Gly	gta Val	tcc Ser	caa Gln 65	Asp	gaa Glu	gaa Glu	ttt Phe	tgg Trp 70	424
aat Asn 71	aca Thr	tac Tyr	gag Glu	ggt Gly	ctg Leu 76	Gln	gaa Glu	cag Gln	ctc Leu	ago Ser 81	Arg	aat Asn	act Thr	cat His	aaa Lys 86	472
gag Glu 87	act Thr	gag Glu	cct Pro	gtg Val	tat Tyr 92	Glu	agg Arg	gct Ala	gtg Val	cct Pro 97	Thr	caa Gln	cag Gln	att Ile	cta Leu 102	520
gct Ala 103	ttt Phe	cct Pro	gag Glu	caa Gln	aca Thr 108	aac Asn	acc Thr	aaa Lys	gac Asp	tgg Trp 113	aca Thr	gtg Val	aca Thr	cct Pro	gag Glu 118	568
cac His 119	gtc Val	ttg Leu	cct Pro	gag Glu	tcc Ser 124	cag Gln	agc Ser	ttg Leu	ttg Leu	aca Thr 129	ttt Phe	gaa Glu	gaa Glu	gtg Val	gcc Ala 134	616
atg Met 135	tat Tyr	ttt Phe	tcc Ser	cag Gln	gaa Glu 140	gaa Glu	tgg Trp	gag Glu	tta Leu	ttg Leu 145	gat Asp	ccc Pro	act Thr	cag Gln	aag Lys 150	664
gcc Ala 151	ctc Leu	tac Tyr	aat Asn	gat Asp	gta Val 156	atg Met	cag Gln	gaa Glu	aac Asn	tat Tyr 161	gag Glu	act Thr	gtc Val	atc Ile	tct Ser 166	712
cta Leu 167	gca Ala	ttg Leu	ttt Phe	gtg Val	ctc Leu 172	ccc Pro	aaa Lys	cct Pro	aaa Lys	gtg Val 177	atc Ile	tcc Ser	tgt Cys	cta Leu	gag Glu 182	760
caa Gln 183	gly aaa	gaa Glu	gag Glu	cca Pro	tgg Trp 188	gtt Val	caa Gln	gta Val	tcc Ser	ccg Pro 193	gag Glu	ttt Phe	aag Lys	gat Asp	agt Ser 198	808
gcc Ala 199	gga Gly	aaa Lys	tct Ser	cct Pro	aca Thr 204	gly aaa	tta Leu	aag Lys	ctc Leu	aaa Lys 209	aac Asn	gac Asp	act Thr	gaa Glu	aat Asn 214	856
cat His 215	cag Gln	cct Pro	gcg Ala	tct Ser	ctt Leu 220	tct Ser	gac Asp	tta Leu	gaa Glu	ata Ile 225	caa Gln	gca Ala	tca Ser	gca Ala	ggc Gly 230	904
gtc Val 231	ata Ile	tca Ser	aaa Lys	aag Lys	gcc Ala 236	aaa Lys	gta Val	aaa Lys	gtt Val	ccc Pro 241	cag Gln	aaa Lys	aca Thr	gca Ala	ggc Gly 246	952

aaa Lys 247	Glu	aat Asn	cat His	ttt Phe	gat Asp 252	atg Met	cac His	aga Arg	gtg Val	gga Gly 257	Lys	tgg Trp	cac His	caa Gln	gat Asp 262	1000
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	Lys														cct Pro 294	1096
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cag Gln 327	tgt Cys	gat Asp	aag Lys	agg Arg	ttt Phe 332	aga Arg	tgg Trp	agt Ser	tca Ser	gat Asp 337	ctt Leu	aat Asn	aag Lys	cac His	tta Leu 342	1240
aca Thr 343	aca Thr	cac His	caa Gln	gga Gly	ata Ile 348	aaa Lys	cca Pro	tat Tyr	aaa Lys	tgt Cys 353	tca Ser	tgg Trp	tgt Cys	gly ggg	aaa Lys 358	1288
agc Ser 359	ttc Phe	agt Ser	caa Gln	aat Asn	aca Thr 364	aat Asn	tta Leu	cat His	aca Thr	cac His 369	caa Gln	aga Arg	act Thr	cat His	aca Thr 374	1336
gga Gly 375	gaa Glu	aag Lys	ccc Pro	ttc Phe	aca Thr 380	tgt Cys	cat His	gaa Glu	tgt Cys	gga Gly 385	aaa Lys	aaa Lys	ttc Phe	agt Ser	cag Gln 390	1384
aac Asn 391	tcc Ser	cac His	ctt Leu	att Ile	aaa Lys 396	cac His	cgg Arg	aga Arg	acc Thr	cac His 401	aca Thr	ggt Gly	gag Glu	cag Gln	cca Pro 406	1432
tat Tyr 407	act Thr	tgt Cys	agc Ser	ata Ile	tgc Cys 412	agg Arg	aga Arg	aac Asn	ttc Phe	agc Ser 417	agg Arg	cgg Arg	tca Ser	agc Ser	ctt Leu 422	1480
ctt Leu 423	aga Arg	cac His	cag Gln	aaa Lys	ctc Leu 428	cac His	ctg Leu	tga *	agag	a ag	cttg	tcca	gtg	ıtcct	cat	1532
tctg	aaga	ca t	tcac	caaa	t gg	agct	tggc	act	aaaa	ttt	atgt	aaag	aa a	aato	acaaa	1592
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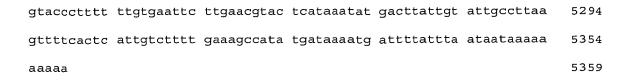
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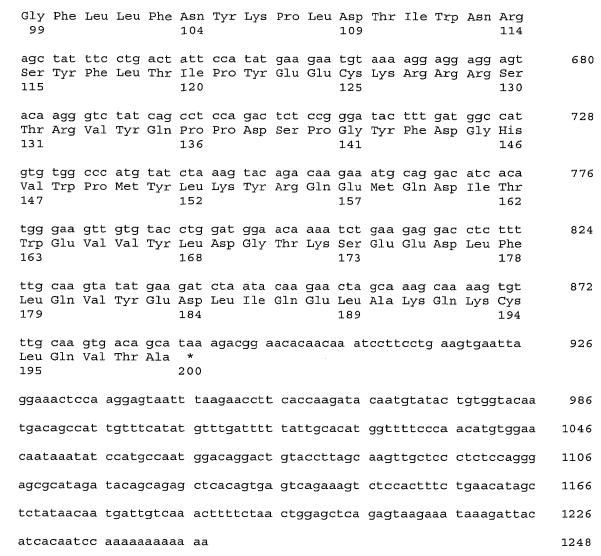


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ttg aca cac aca cac aca cac aca cac aca cac aca cac aca cga cat gct cct Leu Thr His Thr His Thr His Thr His Thr His Thr Arg His Ala Pro 34 39 44 49	4702
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		_			-		_						_		ccctct		
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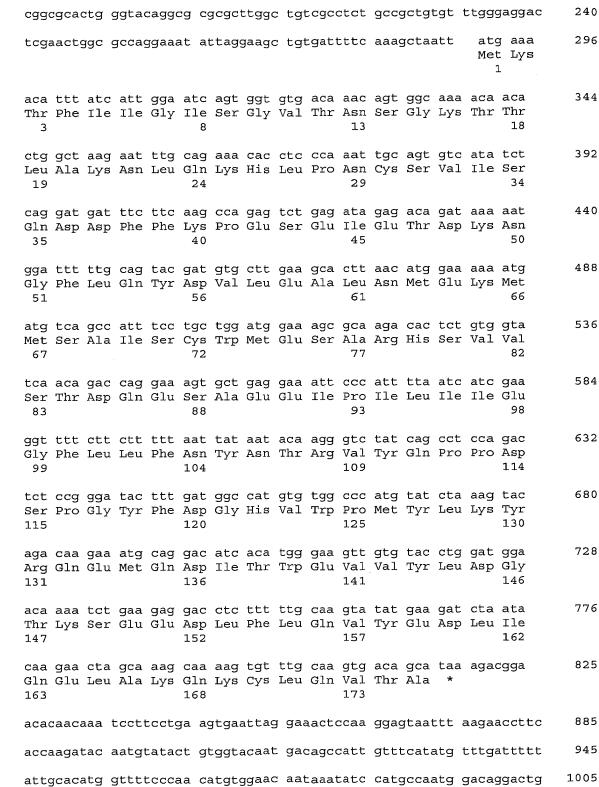
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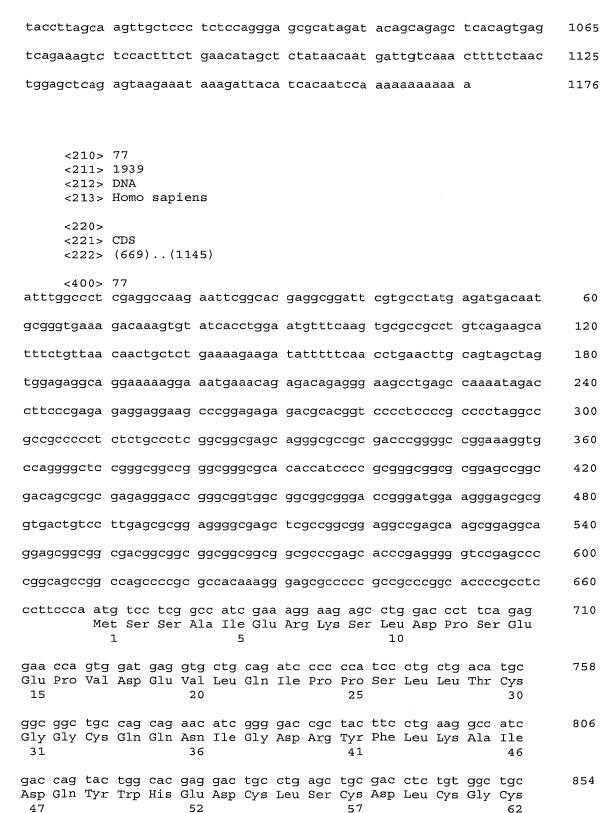
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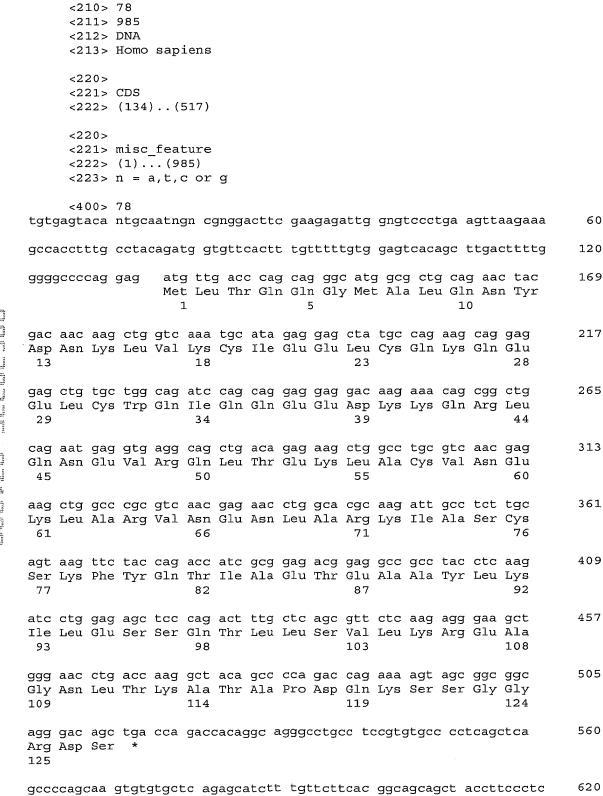
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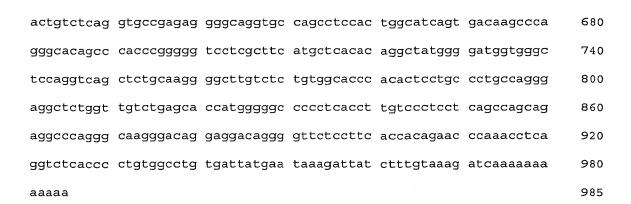
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	-		_	_								-		ctc Leu		950
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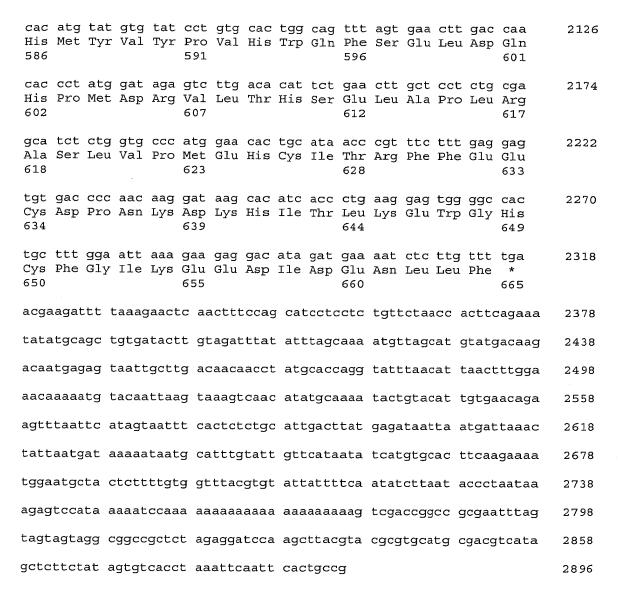
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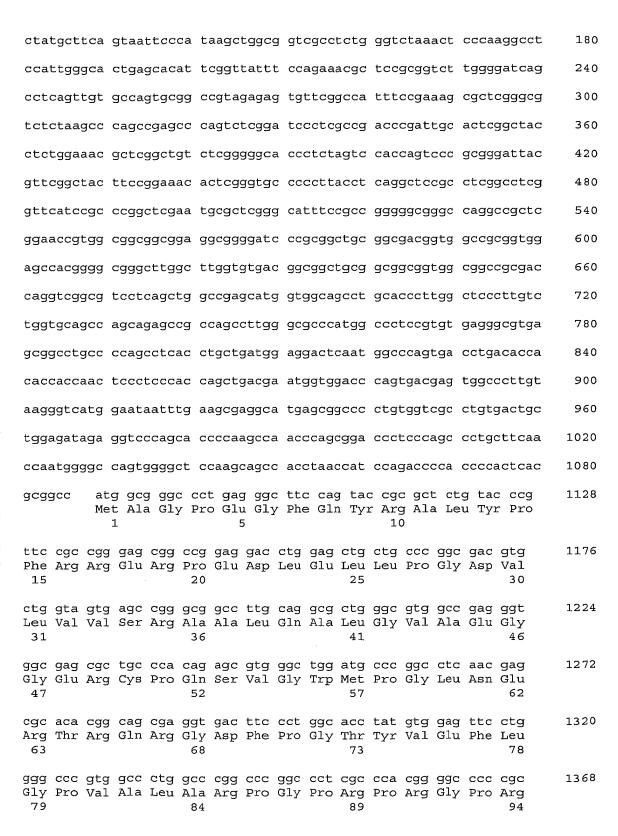
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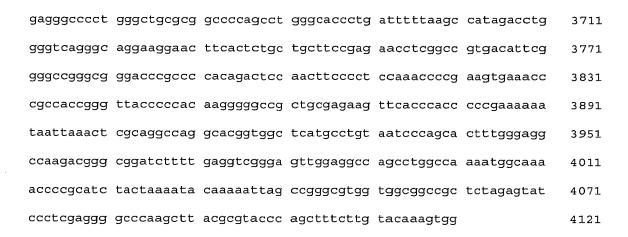


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ctg Leu 239	ggt Gly	ccc Pro	gcg Ala	gtc Val	cgg Arg 244	gcc Ala	ctg Leu	ggc Gly	gcc Ala	acc Thr 249	ttt Phe	Gly ggg	ccg Pro	ctg Leu	ctg Leu 254	1848
ctg Leu 255	cgc Arg	gcg Ala	ccg Pro	ccg Pro	ccg Pro 260	ccg Pro	tcc Ser	tcg Ser	ccg Pro	ccg Pro 265	cca Pro	Gly ggg	ggc Gly	gct Ala	ccc Pro 270	1896
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_									_	_	atc Ile	_	_			2	2232
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_	_		_	-		-	-			_	gtg Val		_	_		2	2424
											cgc Arg					2	2472
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			Glu	Āla		Asn	Glu		Ile	Lys	atc Ile		-		_	2	568
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-							_				ctg Leu					2	664
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		-	_		-	_	_	_	_		aga Arg			_	_	2	760

543					548					553					558	
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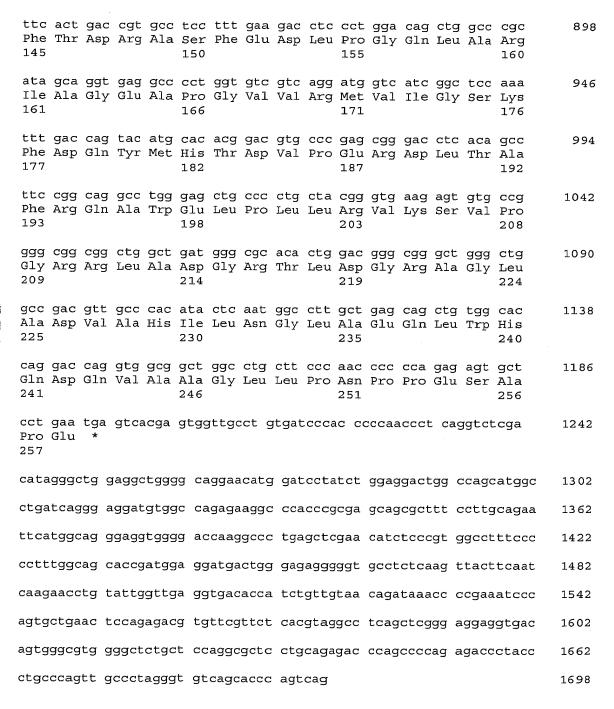
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						ttc Phe				1011
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	_		_		_	tca Ser			_	1107
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					cag Gln 305											1203
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			_	_	aat Asn 353	-	-			_			_		_	1347
		_			atg Met 369	_	-				_					1395
					aaa Lys 385											1443
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~ ~		-			caa Gln 417	_		_			-		_	-	-	1539
					ccc Pro 433											1587
_		_			ttc Phe 449				_					_		1635
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					cag Gln 481											1731
					aaa Lys 497											1779
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ggt	aaa	gcc	ttc	agc	caa	aag	caa	aac	ttc	att	aca	cat	caa	aaa	gtt	1875

	Gly 524	Lys	Ala	Phe	Ser	Gln 529	Lys	Gln	Asn	Phe	Ile 534	Thr	His	Gln	Lys	Val 539	
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			att Ile														1971
			tat Tyr														2019
			aat Asn														2067
**************************************			gaa Glu														2115
the time that			aga Arg														2163
M. dimit rang pres.			gcc Ala														2211
The deco. In F	cat His 652	aca Thr	ggt Gly	gag Glu	aaa Lys	ccc Pro 657	tat Tyr	gaa Glu	tgt Cys	aag Lys	gaa Glu 662	tgc Cys	aga Arg	aaa Lys	gcc Ala	ttc Phe 667	2259
	agc Ser 668	cac His	aag Lys	aaa Lys	aac Asn	ttc Phe 673	att Ile	aca Thr	cac His	cag Gln	aaa Lys 678	att Ile	cat His	act Thr	aga Arg	gag Glu 683	2307
		Pro	tta Leu	Ser		Ile	Ile	Val	Glu		Ala	Ser					2355
			tca Ser				gaat	tc a	tact	ggag	ia ga	agcc.	ctat	gaa	tgta	gta.	2409
	actg	ıtaga	aa a	.gcct	tcag	ıt ca	.caag	gaaa	aac	ttat	taa	acat	tata	aa g	tcga	cgcgg	2469
	ccgc	gaat	tc g	gato	ctcg	a ga	gatc.	tctt	ttt	ttgg	gtt	tggt	aaaa	ta t	cttc	atcat	2529
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<sup>&</sup>lt;211> 2188

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43
i al
41
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Ü
illini Gran
<b>20</b>
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* 4
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				cac His													885
				agg Arg													933
				ctt Leu													981
in mir	aca Thr 212	ctt Leu	tcc Ser	aaa Lys	agc Ser	agc Ser 217	gag Glu	gta Val	ttc Phe	acc Thr	aca Thr 222	ttc Phe	aag Lys	cag Gln	gag Glu	atg Met 227	1029
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33

49

356

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gag Glu 186	agc Ser	aag Lys	agc Ser	aag Lys	ctc Leu 191	att Ile	gct Ala	ctc Leu	ttc Phe	tgg Trp 196	aag Lys	gca Ala	cat His	atg Met	aat Asn 201	747
gct Ala 202	aag Lys	cgc Arg	tgt Cys	ccc Pro	cac His 207	tgc Cys	aag Lys	acc Thr	Gly	cga Arg 212	tcc Ser	gtt Val	gtc Val	cga Arg	aag Lys 217	795
gaa Glu 218	cac His	aac Asn	agc Ser	aag Lys	ttg Leu 223	act i	atc . Ile '	aca Thr	Phe	cca Pro 228	gcc Ala	atg Met	gtg Val	cac His	agg Arg 233	843

aca Thr 234	: Ala	ggc Gly	cag Glr	g aag Lys	gad Asp 239	Ser	gag Glu	g ccc	ctç Lev	gga Gly 244	r Ile	gag Glu	g gaa ı Glu	ı gct ı Ala	cag Gln 249	891
ata Ile 250	: Gly	. aaa Lys	cga Arg	gga Gly	tac Tyr 255	Leu	aca Thr	ccc Pro	acc Thr	agt Ser 260	Ala	e cgc	gaa Glu	cac His	ctt Leu 265	939
tct Ser 266	Ala	ctg Leu	tgg Trp	aag Lys	aat Asn 271	Glu	gga Gly	ttc Phe	ttt Phe	ctg Leu 276	. Asn	tac Tyr	ctt Leu	ttt Phe	tcg Ser 281	987
gga Gly 282	Met	gat Asp	gat Asp	gat Asp	ggt Gly 287	atg Met	gaa Glu	tcc Ser	aga Arg	ttc Phe 292	aat Asn	ccc Pro	agt Ser	gtg Val	ttc Phe 297	1035
ttt Phe 298	cta Leu	gat Asp	ttc Phe	ttg Leu	gtg Val 303	gtg Val	ccg Pro	ccc Pro	tca Ser	agg Arg 308	tat Tyr	cgc Arg	cca Pro	gtc Val	agt Ser 313	1083
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gct Ala 330	gtc Val	atg Met	aag Lys	gat Asp	gta Val 335	gtt Val	ctg Leu	att Ile	cga Arg	aaa Lys 340	ctt Leu	ctg Leu	gca Ala	ttg Leu	atg Met 345	1179
gcc Ala 346	caa Gln	gaa Glu	cag Gln	aag Lys	ttg Leu 351	cca Pro	gag Glu	gaa Glu	gtg Val	gcc Ala 356	aca Thr	ccc Pro	act Thr	aca Thr	gat Asp 361	1227
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ctt Leu 378	cca Pro	ggc Gly	cag Gln	tcc Ser	ctc Leu 383	ata Ile	gac Asp	aaa Lys	ctt Leu	tac Tyr 388	aac Asn	att Ile	tgg Trp	att Ile	cgc Arg 393	1323
ctt Leu 394	cag Gln	agc Ser	cac His	gtc Val	aat Asn 399	att Ile	gtg Val	ttt Phe	gat Asp	agc Ser 404	gag Glu	atg Met	gac Asp	aaa Lys	cta Leu 409	1371
atg Met 410	atg Met	gac Asp	aag Lys	tac Tyr	cca Pro 415	ggc Gly	att Ile	agg Arg	cag Gln	atc Ile 420	ctg Leu	gag Glu	aag Lys	aaa Lys	gaa Glu 425	1419
ggc Gly 426	ctg Leu	ttc Phe	cga Arg	aaa Lys	cac His 431	atg Met	atg Met	gga Gly	aag Lys	cga Arg 436	gtg Val	gac Asp	tac Tyr	gct Ala	gcg Ala 441	1467
cgc Arg 442	tca Ser	gtc Val	atc Ile	tgc Cys	cca Pro 447	gac Asp	atg Met	tac Tyr	Ile	aac Asn 452	acc Thr	aac Asn	gaa Glu	att Ile	gga Gly 457	1515

	at: 11: 45:	e Pr	c at o Me	g gt t Va	g tt l Ph	t gc e Ala 46	a Thi	a aad	a cto s Lei	g aco	c tac c Ty: 468	r Pr	a cag o Gli	g cc n Pr	a gt o Va	t acc l Thr 473	1563
	Pro 474	o Tr	g aa p As	t gt n Va	t ca l Gl	g gaa n Glu 479	ı Lei	agg 1 Arg	g caa g Glr	a gcg 1 Ala	g gto a Val 484	LIle	c aad e Ası	gg n Gl	c cci y Pro	t aat O Asn 489	1611
	gt <u>c</u> Va] 490	L H1:	c cc s Pr	a gga o Gl	a gc	c tco a Sei 495	r Met	g gto : Val	c ato	aat Asr	gag Glu 500	ı Ası	c ggd	c ago ⁄ Sei	c cgo r Arg	c aca g Thr 505	1659
	gcc Ala 506	ı Leı	g ägd u Sei	c gct	t gto	g gad l Asp 511	Met	aco Thr	c cag Gln	g cga Arg	gag Glu 516	ı Ala	gtg a Val	gco Ala	c aag a Lys	g cag s Gln 521	1707
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Lak Rak	gtg Val 538	Cys	c cgg	g cat g His	gtg Val	g aag L Lys 543	Asn	Gly 999	gac Asp	att Ile	ctg Leu 548	Leu	ctg Leu	aac Asn	cga Arg	cag Gln 553	1803
The Con the time that the	ccc Pro 554	Thr	ctg Leu	cac His	aga Arg	ccc Pro 559	Ser	atc Ile	cag Gln	gcc Ala	cac His 564	cgt Arg	gcc Ala	cgc Arg	atc Ile	ctg Leu 569	1851
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	666 Gly 999	cgc Arg	gtg Val	aag Lys	ctc Leu	ctt Leu 671	tct Ser	cct Pro	tcc Ser	Ile	ctg Leu 676	aag Lys	ccc Pro	ttt Phe	ccg Pro	ctg Leu 681	2187
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Trp 682	Thr	. GlÀ	, Lys	s Glr	0 Val 687		. Ser	Thr	Leu	1 Let 692		e Asr	ı Ile	e Ile	e Pro 697	
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tgc Cys 746	gga Gly	gtg Val	ctg Leu	gac Asp	aag Lys 751	gcg Ala	cac His	tat Tyr	Gly aaa	agc Ser 756	Ser	gcc Ala	tac Tyr	ggc	ctg Leu 761	2427
gtc Val 762	cac His	tgc Cys	tgc Cys	tat Tyr	gag Glu 767	atc Ile	tat Tyr	gga Gly	ggc	gag Glu 772	Thr	agc Ser	gly	aag Lys	gtt Val 777	2475
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ggc Gly 794	ttc Phe	acc Thr	ttg Leu	ggc Gly	gtg Val 799	gaa Glu	gac Asp	att Ile	ttg Leu	gtg Val 804	aag Lys	cca Pro	aag Lys	gca Ala	gat Asp 809	2571
gtc Val 810	aag Lys	agg Arg	caa Gln	cgt Arg	atc Ile 815	att Ile	gaa Glu	gaa Glu	tcc Ser	acc Thr 820	cac His	tgc Cys	gl <sup>A</sup> aaa	ccc Pro	cag Gln 825	2619
gct Ala 826	gtc Val	agg Arg	gct Ala	gca Ala	tta Leu 831	aac Asn	ctg Leu	cca Pro	gaa Glu	gcc Ala 836	gca Ala	tca Ser	tat Tyr	gat Asp	gag Glu 841	2667
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ttt Phe 858	aac Asn	atg Met	att Ile	gat Asp	ctg Leu 863	aag Lys	ttc Phe	aag Lys	gag Glu	gaa Glu 868	gtg Val	aac Asn	cat His	tac Tyr	agc Ser 873	2763
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cca Pro 890	gag Glu	aac Asn	acg Thr	ctg Leu	cag Gln 895	ctg Leu	atg Met	gtg Val	cag Gln	tcg Ser 900	gga Gly	gcc Ala	aaa Lys	ggt Gly	tca Ser 905	2859
act of	gtg Val	aac Asn	acg Thr	atg Met	cag Gln	atc Ile	tcg Ser	tgc Cys	ctg Leu	ctg Leu	ggc Gly	cag Gln	att Ile	gaa Glu	ctg Leu	2907

	906	5				911	-				916	5				921	
	gaa Glu 922	ı Gly	cgg Arg	g ago g Sei	c aco	e deg Pro 927	Leu	atg Met	g gcg : Ala	g tct Ser	ggc Gl <sub>y</sub> 932	/ Lys	g tca s Ser	cto Lei	g ccc ı Pro	tgc Cys 937	2955
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And And And	ctg Leu 1018	tat Tyr	gly aaa	gag Glu	Asp	ggc Gly 1023	ctg Leu	gac Asp	atc Ile	Pro	aag Lys 1028	aca Thr	cag Gln	ttc Phe	ctg Leu 1	cag Gln .033	3243
A STORE OF S	ccc Pro 1034	aag Lys	cag Gln	ttc Phe	Pro	ttc Phe 1039	ctg Leu	gcc Ala	agc Ser	Asn	tac Tyr 1044	gag Glu	gtg Val	ata Ile	atg Met 1	aaa Lys .049	3291
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Harry Harry	ctc Leu 1066	cac His	cac His	ttc Phe	Arg	gct Ala 1071	atc Ile	aaa Lys	aaa Lys	$\operatorname{Trp}$	caa Gln 1076	agc Ser	aag Lys	cac His	ccc Pro 1	aac Asn 081	3387
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	aga Arg 1114	ccc Pro	tgg Trp	gac Asp	Ser	999 119	agg Arg	atg Met	ctg Leu	Arg	atg Met 124	tgg Trp	tat Tyr	gag Glu	ttg 9 Leu 1	gat Asp 129	3531
	gag Glu 1130	gaa Glu	agc Ser	cga Arg	Arg	aaa Lys 135	tac Tyr (	cag Gln	aag Lys	Lys	gcg Ala 140	gcc Ala	gct Ala	tgt Cys	cct o Pro 1	gac Asp 145	3579

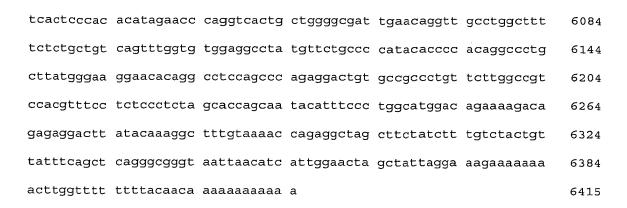
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	gaa Gli 1162	ı Thr	ttt Phe	gaa Glu	Thr	aag Lys 1167	Val	gat Asp	gac Asp	tao Tyi	c agt Ser 1172	Glr	a gag n Glu	tgg Tr	g gca p Ala	gct Ala 1177	3675
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	agg Arg 1194	Thr	ttg Leu	ctg Leu	Gln	ctg Leu 1199	aag Lys	tgg Trp	cag Gln	cgo Arg	tca Ser 1204	Leu	tgt Cys	gag	g ccg ı Pro	ggc Gly 1209	3771
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of the second	cag Gln 1226	Met	acc Thr	ctc Leu	Asn	acc Thr 1231	ttc Phe	cac His	ttt Phe	Ala	ggc Gly 1236	aga Arg	gly	gag Glu	Met	aac Asn 1241	3867
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	tcc Ser 1354	atc Ile	aaa Lys	aag Lys	Lys 1	aat a Asn 1 359	aat a Asn 1	aaa Lys <i>l</i>	gca Ala	Ser	gct Ala 364	ttc Phe	agg Arg	aac Asn	Val	aac Asn 369	4251

	act Thi 1370	c Arg	a aga g Arg	a gct g Ala	aca Thr	cag Gln 1375	Arg	gat Asp	ctg Leu	gac Asp	aac Asn 1380	ı Ala	ggg Gly	gaq Gli	g ttg ı Lei	g ggg 1385	4299
give grown grown arms grows arms grows are grown grown and grown grown grown grown and grown gro	ag <u>q</u> Arg 1386	y Sei	cgg Arg	g gga	r Glu	cag Gln 1391	Glu	ggt Gly	gat Asp	gag Glu	gaa Glu 1396	Glu	g gag ı Glu	GJ <sup>7</sup> 1 333	g cac / His	att Ile 1401	4347
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and the fan tak	gtc Val 1706	gtc Val	agg Arg	ggc	Gly	aca Thr 711	ggc Gly	ctg Leu	ttc Phe	Glu	ctc Leu 716	aag Lys	cag Gln	cct Pro	Leu	aga Arg .721	5307
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and Hard	ccag	cctg	cc t	tctg	catg	a ga	ggac	cagg	aga	ctgg	aat	ccag	ggca	gt t	ccaa	gtgac	5424
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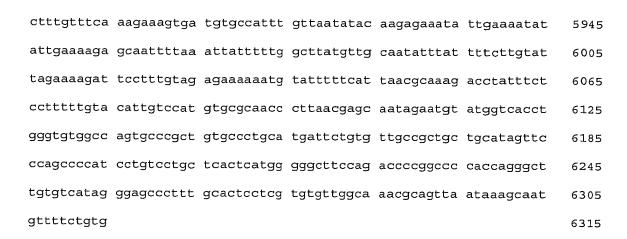
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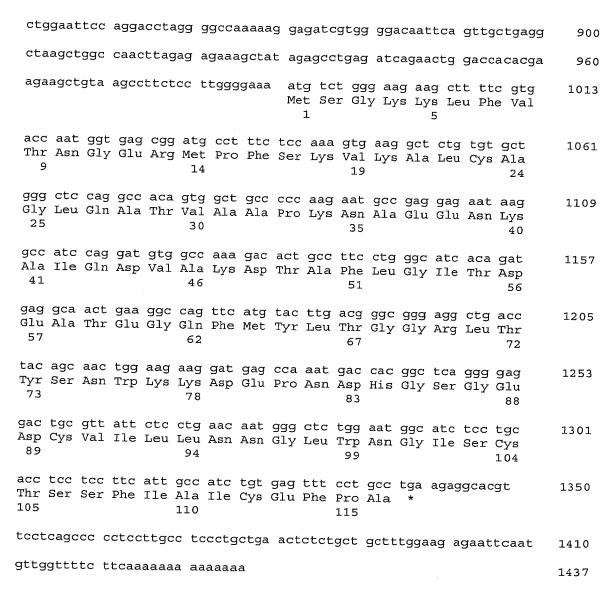
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tgtggcgaat gctttgacct caaagtcaac cccacaggac ttccctgaat cttgtggagc	180

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cctggttggt gacaaatcac aaggtggtag aagttgccag ggacagataa c atg gca

240

297

Met Ala 1

															Τ	
AI	c ag a Se 3	c gg r Gl	g aa .y Ly	ig ac	c ag ır Se	c aa r Ly 8	g tc s Se	c gaa r Gli	a cc u Pr	g aa o Asi 1:	n Hi	t gt s Va	t ate	c tt e Ph	c aag e Lys 18	345
aa Ly 1	S II	c to e Se	c co r Ar	g As	c aa p Ly 2	s Se	g gte r Vai	g aco	c ato	c tac e Ty: 29	r Lei	n Gli	g aad y Asi	c ag n Ar	a gac g Asp 34	393
tad Ty: 3!	r. TT	a ga e As	c ca p Hi	t gt s Va	c ag l Se:	r Gli	a gto n Val	c caç l Glr	g cct n Pro	gto Val	l Asp	t ggt p Glz	gto Val	gto Val	g ttg l Leu 50	441
gti Val 51	L AS	cc Pr	t ga o As	t ct p Le	t gtg u Val	l Lys	g gga	a aa <u>c</u> / Lys	g aaa Lys	a gtg s Val 61	. Туз	gto Val	act Thr	cto Lei	g acc I Thr 66	489
tgo Cys 67	S Ala	tt a Ph	c cg e Ar	c ta g Ty	t ggd r Gly 72	/ Glr	a gag n Glu	gac ı Asp	att Ile	gac Asp	Val	g ato . Ile	ggc Gly	ttg Leu	g acc Thr 82	537
tto Phe 83	Arg	agg J Arg	g ga g As	c cto	g tac ı Tyr 88	: Phe	tcc Ser	cgg Arg	gtc Val	cag Gln 93	gtg Val	tat Tyr	cct Pro	cct Pro	gtg Val 98	585
99 Gly 999	. Ата	gcg Ala	g age	c acc	c ccc Pro 104	Thr	aaa Lys	ctg Leu	caa Gln	gag Glu 109	agc Ser	ctg Leu	ctt Leu	aaa Lys	aag Lys 114	633
ctg Leu 115	GTA	ago Ser	aac Ası	acg Thi	tac Tyr 120	ccc Pro	ttt Phe	ctc Leu	ctg Leu	acg Thr 125	ttt Phe	cct Pro	gac Asp	tac Tyr	ttg Leu 130	681
ccc Pro 131	tgt Cys	tca Ser	gto Val	, ato Met	ttg Leu 136	cag Gln	cca Pro	gct Ala	cca Pro	caa Gln 141	gat Asp	tca Ser	gl <sup>y</sup> aaa	aag Lys	tcc Ser 146	729
tgt Cys 147	gly aaa	gtt Val	gac	ttt Phe	gag Glu 152	gtc Val	aaa Lys	gca Ala	ttc Phe	gcc Ala 157	aca Thr	gac Asp	agc Ser	acc Thr	gat Asp 162	777
gcc Ala 163	gaa Glu	gag Glu	gac Asp	aaa Lys	atc Ile 168	ccc Pro	aag Lys	aag Lys	agc Ser	tcc Ser 173	gtg Val	cga Arg	tta Leu	ctg Leu	atc Ile 178	825
cgc Arg 179	aaa Lys	gta Val	cag Gln	cat His	gcc Ala 184	cca Pro	ctt Leu	gag Glu	atg Met	ggt Gly 189	ccc Pro	cag Gln	ccc Pro	cga Arg	gct Ala 194	873
gag Glu 195	gcg Ala	gcc Ala	tgg Trp	cag Gln	ttc Phe 200	ttc Phe	atg Met	tct Ser	Asp	aag Lys 205	ccc Pro	ctg Leu	cac His	ctt Leu	gcg Ala 210	921
gtc Val	tct Ser	ctc Leu	aac Asn	aaa Lys	gag Glu	atc Ile	tat Tyr	ttc Phe	cat His	gly aaa	gag Glu	ccc Pro	atc Ile	cct Pro	gtg Val	969

211					216	5				22	1				226	
acc Thr 227	gtg Val	act Thr	gtc Val	acc Thr	aat Asn 232	Asr	c aca	gag Glu	g aag Lys	g aco Thi	r Val	g aag Lys	g aag E Lys	g at	t aaa e Lys 242	1017
gca Ala 243	ttc Phe	gtg Val	gaa Glu	cag Gln	gtg Val 248	Ala	aat Asn	gtg Val	gtt Val	Leu 253	ı Tyr	tcc Ser	g agt Ser	gat Asp	t tat 7 Tyr 258	1065
tac Tyr 259	gtc Val	aag Lys	ccc Pro	gtg Val	gct Ala 264	atg Met	gag Glu	gaa Glu	gcg Ala	Caa Glr 269	ı Glu	aaa Lys	gtg Val	Pro	e cca Pro 274	1113
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aat Asn 291	cga Arg	gaa Glu	agg Arg	aga Arg	ggc Gly 296	att Ile	gcc Ala	ctg Leu	gat Asp	999 301	Lys	atc Ile	aag Lys	cac His	gag Glu 306	1209
gac Asp 307	aca Thr	aac Asn	ctt Leu	gcc Ala	tcc Ser 312	agc Ser	acc Thr	atc Ile	att Ile	aag Lys 317	gag Glu	ggc Gly	ata Ile	gac Asp	cgg Arg 322	1257
acc Thr 323	gtc Val	ctg Leu	gga Gly	atc Ile	ctg Leu 328	gtg Val	tct Ser	tac Tyr	cag Gln	atc Ile 333	aag Lys	gtg Val	aag Lys	ctc Leu	aca Thr 338	1305
gtg Val 339	tca Ser	ggc	ttt Phe	ctg Leu	gga Gly 344	gag Glu	ctc Leu	acc Thr	tcc Ser	agt Ser 349	gaa Glu	gtc Val	gcc Ala	act Thr	gag Glu 354	1353
gtc ( Val 1 355	cca Pro	ttc Phe	cgc Arg	ctc Leu	atg Met 360	cac His	cct Pro	cag Gln	cct Pro	gag Glu 365	gac Asp	cca Pro	gct Ala	aag Lys	gaa Glu 370	1401
agt t Ser 5 371	cat ( Tyr (	cag ( Gln .	gat Asp	Ala	aat Asn 376	tta Leu	gtt Val	ttt Phe	Glu	gag Glu 381	ttt Phe	gct Ala	cgc Arg	cat His	aat Asn 386	1449
ctg a Leu I 387	aaa q Lys <i>I</i>	gat q Asp 1	gca ( Ala (	этУ	gaa Glu 392	gct Ala	gag Glu	gag Glu	Gly :	aag Lys 397	aga Arg	gac Asp	aag Lys	aat Asn	gac Asp 402	1497
att g Ile A 403	sat o	gag t Blu	iga a *	aga	tgtc	ggct	ca g	gatg	ccgg	a aa	atga	cctg	tag	ttac	cag	1552
tgcaa	cgaç	gc aa	agco	cca	c agt	tta	gtcc	ttt	ggagt	tta	tgct	gcgt	at g	aaag	gatga	1612
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cgc Arg 156	Asn	ctg Leu	gat LAsp	ggo Gl	c cag y Glr 161	ı Lys	gag Glu	g tgg ı Trp	g gto Val	c cad l Hi: 160	s Va	g gca l Ala	a cci	cto Lei	c cca 1 Pro 171	771
gac Asp 172	acc Thr	tac Tyr	agg Arg	d Gl <sup>7</sup> A GG	2 ccc 7 Pro 177	) Tyr	cgg Arg	g gag g Glu	g gad 1 As <u>r</u>	c cac P His 182	s Pro	c aad o Asr	c cca	a gct o Ala	atg Met 187	819
gcc Ala 188	tat Tyr	gcc Ala	aac Asn	gag Glu	g gtg Val 193	. Lys	cgt Arg	gtg Val	gto Val	ago L Ser 198	: Sei	gca Ala	ı caç ı Glr	gag Glu	aag Lys 203	867
ggc Gly 204	agg Arg	aag Lys	att Ile	gca Ala	gco Ala 209	Phe	ttc Phe	gct Ala	gag Glu	tct Ser 214	Leu	g cco l Pro	: agt	gtg Val	gga Gly 219	915
999 220	cag Gln	atc Ile	att Ile	ccc Pro	Pro 225	gct Ala	ggc	tac Tyr	ttc Phe	tcc Ser 230	Gln	ı gtg ı Val	gca Ala	gag Glu	cac His 235	963
atc Ile 236	cgc Arg	aag Lys	gcc Ala	gga Gly	999 Gly 241	gtc Val	ttt Phe	gtt Val	gca Ala	aat Asn 246	Glu	atc Ile	cag Gln	gtt Val	ggc Gly 251	1011
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gac Asp 268	ttc Phe	gtc Val	cct Pro	gac Asp	atc Ile 273	gtc Val	acc Thr	atg Met	ggc	aag Lys 278	tcc Ser	att Ile	ggc	aac Asn	ggc Gly 283	1107
cac His 284	Pro	Val	Ala	Cys	Val 289	Ala	Ala	Thr	Gln	Pro 294	Val	Ala	Arg	Ala	Phe 299	1155
gaa Glu 300	gcc Ala	acc Thr	gly ggc	gtt Val	gag Glu 305	tac Tyr	ttc Phe	aac Asn	acg Thr	ttt Phe 310	Gly 999	ggc Gly	agc Ser	cca Pro	gtg Val 315	1203
tcc Ser 316	Сув	Ala	Val	Gly	Leu 321	Ala	Val	Leu	Asn	Val 326	Leu	Glu	Lys	Glu	Gln 331	1251
ctc ( Leu ( 332	∃Ln .	Asp :	His	Ala	Thr 337	Ser	Val	Gly	Ser	Phe 342	Leu	Met	Gln	Leu	Leu 347	1299
ggg ( Gly ( 348	∌⊥n (	Gin .	гàз	Ile	Lys 353	His	Pro	Ile	Val	Gly 358	Asp	Val	Arg	Gly	Val 363	1347
999 G Gly I 364	ctc 1 Jeu 1	ttc a	att (	GТУ	gtg Val 369	gat ( Asp )	ctg Leu	atc Ile :	Lys	gat Asp 374	gag Glu	gcc Ala	aca Thr	Arg	aca Thr 379	1395

cca gca act gaa gag gct gcc tac ttg gta tca agg ctg aag gag aac Pro Ala Thr Glu Glu Ala Ala Tyr Leu Val Ser Arg Leu Lys Glu Asn 380 385 390 395	1443
tac gtt ttg ctg agc act gat ggc cct ggg agg aac atc ctg aag ttt Tyr Val Leu Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe 396 401 406 411	1491
aag ccc cca atg tgc ttc agc ctg gac aat gca cgg cag gtg gtg gca Lys Pro Pro Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala 412 417 422 427	1539
aag ctg gat gcc att ctg act gac atg gaa gag aag gtg aga agt tgt Lys Leu Asp Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys 428 433 438 443	1587
gaa acg ctg agg ctc cag ccc taa gccagccctg ctctgcctaa gtgtactcca Glu Thr Leu Arg Leu Gln Pro * 449	1641
gaagaaactc atctcatcca aatacacgct attgagaagg cgagcctgac ctccctctta	1701
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cccaccccct cctcctaacc actggtctgt tggaataacc cagatgtctg catcccctca	1821
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Met Leu Ser Ser Arg Ala Glu Ala Ala Met Thr Ala  1 5 10	108
gcc gac agg gcc atc cag cgc ttc ctg cgg acc ggg gcg gcc gtc aga	156

A]	.a As	sp A	rg 1	Ala	Ile	e Gl 1	n Ar 8	g Pl	ne L	eu	Arg	J Th:		ly A	.la	Al	a Va	al	Arg 28	
ta Ty 2	ıt aa Tr Ly 9	a g s V	tc a al N	atg Met	aaç Lys	g aa s As: 3	n Tr	b eg	ga gt .y Va	t al	ata Ile	ggt Gly	y Gl	ga a .y I	tt le	gc Al	t go a Al	ct La	gct Ala 44	204
ct Le 4	t go u Al 5	a g	ca g la G	ıga Hy	ata Ile	tai Ty:	r Va	t at l Il	t to e Ti	.b (	ggt Gly	Pro 55	o Il	t a e T	ca hr	gaa Glu	a ag ı Ar	ga :g	aag Lys 60	252
aa Ly 6	g cg s Ar 1	t ag g Ai	ga a :g L	aa ys	Gly aaa	ctt Lei 66	ı Va	g co l Pr	t gg o Gl	y 1	ctt Leu	gtt Val 71	. As	t ti n Le	ta eu	gl <sup>7</sup> aaa	g aa ⁄ As	n	acc Thr 76	300
tge Cy: 7	c tt s Ph	c at e Me	g a et A	ac sn	tcc Ser	cto Leu 82	ı Leı	a ca u Gl	a gg n Gl	с с у І	ctg Leu	tct Ser 87	. Al	c to a Cy	gt ( /s :	cct Prc	gc Al	t a	ttc Phe 92	348
ato Ile 93	ggg Gly	g tg Y Tr	g c	tg eu	gaa Glu	gag Glu 98	. Phe	ac Th	c tc r Se	c c r G	ag In	tac Tyr 103	tc: Se:	c ag r Ar	.g 1	gat Asp	Ca Gl:	n :	aag Lys 108	396
gag Glu 109	g cco l Pro	c cc Pr	c to o Se	ca er :	cac His	cag Gln 114	Tyr	tta Le	a tc ı Se:	c t	ta eu	aca Thr 119	cto Lei	c tt ı Le	g d u H	cac His	cti Lei	ı ا	ctg Leu 124	444
aaa Lys 125	gco Ala	tt. Le	g to u Se	cc er (	tgc Cys	caa Gln 130	gaa Glu	gtt Val	act Thi	g A	sp	gat Asp 135	gaç Glu	g gt 1 Va	c t l I	ta eu	cat His	s I	gca Ala L40	492
agc Ser 141	tgc Cys	Lei	g tt ı Le	g g eu <i>l</i>	gat Asp	gtc Val 146	tta Leu	aga Arg	atg Met	y t	yr .	aga Arg 151	tgg Trp	caç Gli	ga n I	tc le	tca Ser	. S	ca Ser .56	540
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ttg Leu 173	gaa Glu	gat Asp	ga Gl	g c u A	rg .	gac Asp 178	cgc Arg	cag Gln	cct Pro	CQ A1	g V	gtc Val 183	aca Thr	cat His	t t	tg eu	ttt Phe	A	at sp 88	636
gtg Val 189	cat His	tcc Ser	ct; Le	g g u G	ıu (	cag Gln 194	cag Gln	tca Ser	gaa Glu	at Il	.е 7	act Thr 199	ccc Pro	aaa Lys	G.	aa ln	att Ile	T	cc hr 04	684
tgc Cys 205	cgc Arg	aca Thr	aga Arg	ag G	тА :	tca Ser 210	cct Pro	cac His	ccc Pro	ac Th	r s	cc Ser 1	aat Asn	cac His	te Tr	.b 13	aag Lys	S	ct er 20	732
caa Gln 221	cat His	cct Pro	ttt Phe	Ca H:	IS (	gga Bly 226	aga Arg	ctc Leu	act Thr	ag Se	r A	at a sn 1	atg Met	gtc Val	tg Cy	jc :	aaa Lys	са Ні 23	İs	780
tgt Cys	gaa Glu	cac His	cag Gln	aç Se	gt c er F	cct o	gtt Val	cga Arg	ttt Phe	ga Asj	t a p T	cc t hr E	ttt Phe	gat Asp	ag Se	c o	ctt Leu	to Se	ca er	828

237 242 247 252	
cta agt att cca gcc gcc aca tgg ggt cac cca ttg acc ctg gac cac Leu Ser Ile Pro Ala Ala Thr Trp Gly His Pro Leu Thr Leu Asp His 253 258 263	876
tgc ctt cac cac ttc atc tca tca gaa tca gtg cgg gat gtt gtg tgt Cys Leu His His Phe Ile Ser Ser Glu Ser Val Arg Asp Val Val Cys 269 274 279 284	924
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ctc cct cag tgt ctc tgc atc cac cta cag cgg ctg agc tgg tcc agc Leu Pro Gln Cys Leu Cys Ile His Leu Gln Arg Leu Ser Trp Ser Ser 317 322 327 332	1068
cac ggc acg cct ctg aag cgg cat gag cac gtg cag ttc aat gag ttc His Gly Thr Pro Leu Lys Arg His Glu His Val Gln Phe Asn Glu Phe 333 348	1116
ctg atg atg gac att tac aag tac cac ctc ctt gga cat aaa cct agt Leu Met Met Asp Ile Tyr Lys Tyr His Leu Leu Gly His Lys Pro Ser 349 354 359 364	1164
caa cac aac cct aaa ctg aac aag aac cca ggg cct aca ctg gag ctg Gln His Asn Pro Lys Leu Asn Lys Asn Pro Gly Pro Thr Leu Glu Leu 365 370 375 380	1212
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ctetetetet eteteet eteteeetet tteteetete teacceacae teac	egcacac 240
	eg tat 296 et Tyr 1
tct ccg ctc tgt ctc acc cag gat gaa ttt cat cct ttc atc gaa Ser Pro Leu Cys Leu Thr Gln Asp Glu Phe His Pro Phe Ile Glu 3 8 13	Ala 18
ctt ctg ccc cac gtc cga gcc ttt gcc tac aca tgg ttc aac ctg	cag 392
Leu Leu Pro His Val Arg Ala Phe Ala Tyr Thr Trp Phe Asn Leu	Gln
19 24 29	34
gcc cga aaa cga aaa tac ttc aaa aaa cat gaa aag cgt atg tca	aaa 440
Ala Arg Lys Arg Lys Tyr Phe Lys Lys His Glu Lys Arg Met Ser	Lys
35 40 45	50
gaa gaa gag aga gcc gtg aag gat gaa ttg cta agt gaa aaa cca	gag 488
Glu Glu Glu Arg Ala Val Lys Asp Glu Leu Leu Ser Glu Lys Pro	Glu
51 56 61	66
gtc aag cag aag tgg gca tct cga ctt ctg gca aag ttg cgg aaa	gat 536
Val Lys Gln Lys Trp Ala Ser Arg Leu Leu Ala Lys Leu Arg Lys	Asp
67 72 77	82
atc cga ccc gaa tat cga gag gat ttt gtt ctt aca gtt aca ggg	aaa 584
Ile Arg Pro Glu Tyr Arg Glu Asp Phe Val Leu Thr Val Thr Gly	Lys
83 88 93	98
aaa cct cca tgt tgt gtt ctt tcc aac cca gac cag aaa ggc aag	atg 632
Lys Pro Pro Cys Cys Val Leu Ser Asn Pro Asp Gln Lys Gly Lys	Met
99 104 109	114
cga aga att gac tgc ctc cgc cag gca gat aaa gtc tgg agg ttg	gac 680
Arg Arg Ile Asp Cys Leu Arg Gln Ala Asp Lys Val Trp Arg Leu	Asp
115	130
ctt gtt atg gtg att ttg ttt aaa ggt att ccg ctg gaa agt act g	gat 728
Leu Val Met Val Ile Leu Phe Lys Gly Ile Pro Leu Glu Ser Thr A	Asp
131 136 141	146
ggc gag cgc ctt gta aag tcc cca caa tgc tct aat cca ggg ctc t	tgt 776
Gly Glu Arg Leu Val Lys Ser Pro Gln Cys Ser Asn Pro Gly Leu C	Cys
147 152 157	162

gto Val 163	L GI	a cc n Pr	c ca o Hi	t ca s Hi	c ata s Ila 16	e Gl	g gt y Va	t tc 1 Se:	t gt r Va	t aa 1 Ly 17	s Gl	a ct u Le	c ga u Asj	t tt p Le	a tat u Tyr 178	824
ttg Leu 179	LAL	a ta a Ty:	c tt r Ph	t gt e Va	g cat l His 184	s Ala	a gc	a gat a Asj	t tc p Se:	a ag r Se: 18:	r Gl	a tc n Se	t gaa	a ag u Se:	t ccc r Pro 194	872
ago Ser 195	. GII	g cca n Pro	a agi o Se:	t gad r Asl	get Ala 200	a Asp	c at	t aag e Lys	g gad s Asj	c cag p Gli 20!	n Pro	a gaa o Gli	a aat ı Ası	gga gga	a cat / His 210	920
ttg Leu 211	GIY	tto Phe	caq e Gli	g gad 1 As <u>r</u>	agt Ser 216	Phe	gto Val	c aca	a tca Sei	a ggt c Gly 221	/ Vai	t ttt l Phe	agt Ser	gto Val	act Thr 226	968
gag Glu 227	cta Leu	gta Val	aga Arg	a gtg y Val	tca Ser 232	Gln	aca Thr	cca Pro	ata Ile	a gct e Ala 237	a Ala	a gga a Gl <sub>}</sub>	act Thr	: Gly	cca Pro 242	1016
aat Asn 243	ttt Phe	tct Ser	cto Leu	tca Ser	gat Asp 248	ttg Leu	gaa Glu	agt Ser	tct Ser	tca Ser 253	Tyr	tac Tyr	ago Ser	atg Met	agt Ser 258	1064
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aca Thr 275	aag Lys	cgc Arg	ctc Leu	aag Lys	tct Ser 280	gtg Val	gag Glu	gat Asp	gaa Glu	atg Met 285	Asp	agt Ser	cct Pro	ggt Gly	gag Glu 290	1160
gag Glu 291	cca Pro	ttt Phe	tat Tyr	aca Thr	ggc Gly 296	caa Gln	gly aaa	cgc Arg	tcc Ser	cca Pro 301	gga Gly	agt Ser	ggc Gly	agt Ser	cag Gln 306	1208
tca Ser 307	agt Ser	gga Gly	tgg Trp	cat His	gaa Glu 312	gtg Val	gag Glu	cca Pro	gga Gly	atg Met 317	cca Pro	tct Ser	cca Pro	acc Thr	aca Thr 322	1256
ctg Leu 323	aag Lys	aag Lys	tcg Ser	gag Glu	aag Lys 328	tct Ser	ggt Gly	ttc Phe	agc Ser	agc Ser 333	ccc Pro	tcc Ser	cct Pro	tca Ser	cag Gln 338	1304
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Ala Ile Arg Tyr His Pro Gln Glu Thr Leu Lys Glu Phe Val Gln Leu 387 392 397 402	1496
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<221> CDS

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	ct	ggc	cacc	t gc	catgo	ccct	cago	cggc	ctc o	cagga	acac	cc c	cgtg	ggcg	a cc	ccatggad	180
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	Cto Lei 10	~ 01	ig go .n Al	a at .a Me	g ga t Gl	ıg ga u Gl 1	u Pr	c cc o Pr	g gt o Va	g co l Pr	o Va	c ag l Se	gc gt er Va	c ct ıl Le	c ca u Hi	ac cgc s Arg 25	339
	tto Phe 26		c tt	c to e Se	t tc r Se	g gc r Al. 3:	a ne	g cag u Gl:	g cg n Ar	c at g Me	t Se	t gt r Va 6	g gt 1 Va	g gt 1 Va	g go l Al	g tgg a Trp 41	387
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To have that	acg Thr 106	agg Arg	gac Asp	act Thr	gtg Val	gaa Glu 111	gga Gly	gac Asp	ctg Leu	agc Ser	ctc Leu 116	Leu	Gly 999	ctg Leu	ctg Leu	gtc Val 121	627
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	tct d	ctc	gag	ttc	ctg	ccg	atg	gag	tcc	ccc	aca	gcc	gtg	aat	ggc	gtt	867

Se 18	er Le 86	eu G	lu I	?he	Le	u Pr 19	0 Me	et GI	lu Se	er F	ro	Thr 196		a Va	al A	sn	GlΣ	/ Val 201		
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са Ні 23	o PII	c cc e Pr	c a	ag ys	ctg Leu	Le 23	u Pr	c aa o Ly	g gt s Va	c c	tg eu	gtc Val 244	Cag Gl:	n Gl 9 99	c ac y Th	r	gtc Val	ttt Phe 249	1	011
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cgc Arg 378	acg Thr	999 Gly	cca Pro	ag DA	.ıa .	ctg Leu 383	gtc Val	ctg Leu	gga Gly	cgg Arg	J V	tg c al <i>I</i> 88	gg Arg	cca Pro	ccg Pro	G.	ly A	gcg Ala 393	144	13
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Thr Ser Leu Arg Leu	Ala Thr Val T	yr Thr Pro Pro Pro	Arg Pro Pro
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1156

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Mary Mary
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tggaagccgt ctcaggggcc tgagtgacgg gcctgaccgt ccccgctacc gcctgctgcc	1216
atgegaceag atggetgace eggecegget teteagggee cagaceagee tggeetegtg	1276
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aaa ggc ctt ggc ctc ctc cag ctg ggt ctg ctc ctt cct ttg aac ccc Lys Gly Leu Gly Leu Gln Leu Gly Leu Leu Pro Leu Asn Pro 17 22 27 32	96
atc ggt acc tat gcc cac acc ttt cag agc ttt cct gat cag tgt caa Ile Gly Thr Tyr Ala His Thr Phe Gln Ser Phe Pro Asp Gln Cys Gln 33 48	144
cat gct gct ctt cct ctt aca aaa tgt acc atc aat aca gcc cag gca His Ala Ala Leu Pro Leu Thr Lys Cys Thr Ile Asn Thr Ala Gln Ala 49 54 59	192
cat ggc tcc cac aaa gct agc cac tta tat agt atg ggt cac atc aaa His Gly Ser His Lys Ala Ser His Leu Tyr Ser Met Gly His Ile Lys 65 70 75 80	240
aat gac tcc agc aca atc att cat aca gac ttc tct cac act aaa cct Asn Asp Ser Ser Thr Ile Ile His Thr Asp Phe Ser His Thr Lys Pro 81 96	288
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97 102 107 112	

113	118	123	128
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Leu His His His H	is His Leu Val	l Ala Phe Gly Lys Gln	
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gct aca gaa ctc t	cc tcc tcc tcc	tcc tcc tcc tca tca	tca tca tca 480
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145	150	155	160
161	166	gta gct aca gaa ctc Val Ala Thr Glu Leu 171	Ser Ile Ile 176
177	182	atc atc atc tgg ttg Ile Ile Ile Trp Leu 187	Leu Leu Ala 192
193	198	ctc ctc ctc ctc ctc Leu Leu Leu Leu Leu 203	Leu Leu 208
209	214	tgg ttg ctt tta gca a Trp Leu Leu Leu Ala a 219	Arg Phe Ser 224
225	230	ctc ctc ctc ctc atc a Leu Leu Leu Ile I 235	Ile Ile Ile 240
241	246	agt agc tac aga act o Ser Ser Tyr Arg Thr I 251	eu Leu His 256
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His His Gln His His		Ala Phe Gly Lys Gln G	ly Ser Val
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Ser Gly Cys Phe Gln	g Gln Gly Ser V	Val Ala Thr Glu Leu So	er Ile Ile
289	294	299	304
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Ile Ile Ile Ile Ile	Ile Ile Ile I	le Ile Ile Trp Leu Le	eu Leu Ala
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Arg Phe Ser Ser Tyr	Arg Thr Leu L	eu His His His His Hi	s His His
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and have the	aac Asn 689	att Ile	tta Leu	gaa Glu	ata Ile	ctc Leu 694	gcc Ala	tac Tyr	ctg Leu	gta Val	gtc Val 699	cac His	aga Arg	tct Ser	tta Leu	gat Asp 704	2112
off 16th Wester Specia	ttc Phe 705	att Ile	ggc	cag Gln	caa Gln	aat Asn 710	ctc Leu	aaa Lys	gga Gly	Arg	gaa Glu 715	aga Arg	gag Glu	aac Asn	aag Lys	aga Arg 720	2160
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cgg ccc cgg Arg Pro Arg 401	gac agc gg Asp Ser Gl 40	y Arg Lei	g gac aa. 1 Asp Ly:	a gcg tcg s Ala Ser 411	ccc gac to Pro Asp Se	a cgc 124 r Arg 416	:8
cat agc ccc His Ser Pro 417	gcc acc ato Ala Thr Ilo 42:	= ser ser	agc act Ser Thi	cgc ggc Arg Gly 427	ctg ggc go Leu Gly Al	g gag 129 a Glu 432	6
gag cgc agg Glu Arg Arg 433	agc ccg gtt Ser Pro Val 438	Arg Giu	ggc aca Gly Thr	gcg ccg Ala Pro 443	gcc aag gt Ala Lys Va	g gaa 134. l Glu 448	4
gag gcg cgc g Glu Ala Arg 1 449	gcg ctc ccg Ala Leu Pro 454	, сту гув	gag gcc Glu Ala	ttc gcg Phe Ala 459	ccg ctc ac Pro Leu Th	g gtg 1392 r Val 464	2
cag acg gac g Gln Thr Asp <i>I</i> 465	gcg gcc gcc Ala Ala Ala 470	gcg cac Ala His	ctg gcc Leu Ala	cag ggc Gln Gly 475	ccc ctg cc Pro Leu Pro	5 ggc 1440 5 Gly 480	)
ctc ggc ttc g Leu Gly Phe F 481	gcc ccg ggc Ala Pro Gly 486	ctg gcg Leu Ala	ggc caa Gly Gln	cag ttc Gln Phe 491	ttc aac ggg Phe Asn Gly	g cac 1488 His 496	ŀ
ccg ctc ttc c Pro Leu Phe L 497	etg cac ccc eu His Pro 502	agc cag Ser Gln	ttt gcc Phe Ala	atg ggg g Met Gly 0	ggc gcc tto Gly Ala Phe	tcc 1536 Ser 512	
agc atg gcg g Ser Met Ala A 513	cc gct ggc la Ala Gly 518	atg ggt Met Gly	ccc ctc Pro Leu	ctg gcc a Leu Ala 5 523	acg gtt tct Thr Val Ser	999 1584 Gly 528	
gcc tcc acc g Ala Ser Thr G 529	gt gtc tcg ly Val Ser 534	ggc ctg Gly Leu	Asp Ser	acg gcc a Thr Ala M 539	atg gcc tct Met Ala Ser	gcc 1632 Ala 544	
gct gcg gcg ca Ala Ala Ala Gi 545	ag gga ctg ln Gly Leu 550	tcc ggg Ser Gly	Ala Ser	gcg gcc a Ala Ala T 555	cc ctg ccc hr Leu Pro	ttc 1680 Phe 560	
cac ctc cag ca His Leu Gln Gl 561	ag cac gtc ln His Val 566	ctg gcc : Leu Ala :	ser Gin	ggc ctg g Gly Leu A 571	cc atg tcc la Met Ser	cct 1728 Pro 576	
ttc gga agc ct Phe Gly Ser Le 577	g ttc cct eu Phe Pro 582	tac ccc t Tyr Pro 1	ryr Thr	tac atg g Tyr Met A 587	cc gca gcg la Ala Ala	gcg 1776 Ala 592	
gcc gct tct ct Ala Ala Ser Le	g cgg cag o u Arg Gln l	ect cag c Pro Gln I	tt cgg t eu Arg (	gc acc go	ca ccc ctt la Pro Leu	ctt 1824 Leu	

593 598 603 608	
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ccg gtg ccg gtc ccg gac ggc agc agt ctg ctc acc acc gcc ctg ccc Pro Val Pro Val Pro Asp Gly Ser Ser Leu Leu Thr Thr Ala Leu Pro 625 630 635 640	1920
tcc atg gcg gcg gcc gcg ggg ccc ctg gac ggc aaa gtc gcc gcc ctg Ser Met Ala Ala Ala Ala Gly Pro Leu Asp Gly Lys Val Ala Ala Leu 641 646 651 656	1968
gcc gcc agc ccg gcc tcg gtg gca gtg gac tcg ggc tct gaa ctc acc Ala Ala Ser Pro Ala Ser Val Ala Val Asp Ser Gly Ser Glu Leu Thr 657 662 667 672	2016
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ctc tgc gcg gag aaa gag gcg gcc acc agc gaa ctg cag agc atc cag Leu Cys Ala Glu Lys Glu Ala Ala Thr Ser Glu Leu Gln Ser Ile Gln 689 694 699 704	2112
cgg ttg gtt agc ggc ttg gaa gcc aag ccg gac agg tcc cgc agc gcg Arg Leu Val Ser Gly Leu Glu Ala Lys Pro Asp Arg Ser Arg Ser Ala 705 710 715 720	2160
tcc ccg tag acccgtc ccagacacgt cttttcattc cagtccagtt caggctgccg Ser Pro * 721	2216
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tettgtgatg ttttcagage egetgtaggt etettettge atgtecaeag taatgtattt	2816
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Gl <sub>)</sub> 101	⁄ Asp	Сув	s Asr	n Ph∈	val 106		Pro	Glr.	ı Gly	/ Ile 111		: Ser	: Ile	e Ile	Lys 116	
cat His 117	Tyr	ttg Leu	aaa Lys	gaa Glu	tca Ser 122	Gly	gca Ala	ı gaa ı Glu	gto Val	tac Tyr 127	· Phe	aga Arg	cat His	cgt Arg	gtg Val 132	860
aca Thr 133	Gln	ato Ile	aac Asn	cta Leu	aga Arç	Asp	gac Asp	aaa Lys	tgg Trp	gaa Glu 143	. Val	tcc Ser	aaa Lys	caa Gln	aca Thr 148	908
ggc Gly 149	Ser	cct Pro	gag Glu	cag Gln	ttt Phe 154	Asp	ctt Leu	att Ile	gtt Val	ctc Leu 159	Thr	atg Met	cca Pro	gtt Val	cct Pro 164	956
gag Glu 165	Ile	ctg Leu	cag Gln	ctt Leu	caa Gln 170	Gly	gac Asp	atc Ile	acc Thr	acc Thr 175	tta Leu	att Ile	agt Ser	gaa Glu	tgc Cys 180	1004
caa Gln 181	Arg	cag Gln	caa Gln	ctg Leu	gag Glu 186	Ala	gtg Val	agc Ser	tac Tyr	tcc Ser 191	tct Ser	cga Arg	tat Tyr	gct Ala	ctg Leu 196	1052
ggc Gly 197	ctc Leu	ttt Phe	tat Tyr	gaa Glu	gct Ala 202	ggt Gly	acg Thr	aag Lys	att Ile	gat Asp 207	gtc Val	cct Pro	tgg Trp	gct Ala	999 Gly 212	1100
cag Gln 213	tac Tyr	atc Ile	acc Thr	agt Ser	aat Asn 218	ccc Pro	tgc Cys	ata Ile	cgc Arg	ttc Phe 223	gtc Val	tcc Ser	att Ile	gat Asp	aat Asn 228	1148
aag Lys 229	aag Lys	cgc Arg	aat Asn	ata Ile	gag Glu 234	tca Ser	tca Ser	gaa Glu	att Ile	999 Gly 239	cct Pro	tcc Ser	ctc Leu	gtg Val	att Ile 244	1196
cac His 245	acc Thr	act Thr	gtc Val	cca Pro	ttt Phe 250	gga Gly	gtt Val	aca Thr	tac Tyr	ttg Leu 255	gaa Glu	cac His	agc Ser	att Ile	gag Glu 260	1244
gat Asp 261	gtg Val	caa Gln	gag Glu	tta Leu	gtc Val 266	ttc Phe	cag Gln	cag Gln	ctg Leu	gaa Glu 271	aac Asn	att Ile	ttg Leu	ccg Pro	ggt Gly 276	1292
ttg Leu 277	cct Pro	cag Gln	cca Pro	att Ile	gct Ala 282	acc Thr	aaa Lys	tgc Cys	caa Gln	aaa Lys 287	tgg Trp	aga Arg	cat His	tca Ser	cag Gln 292	1340
gtt Val 293	aca Thr	aat Asn	gct Ala	gct Ala	gcc Ala 298	aac Asn	tgt Cys	cct Pro	ggc Gly	caa Gln 303	atg Met	act Thr	ctg Leu	cat His	cac His 308	1388
aaa Lys 309	cct Pro	ttc Phe	ctt Leu	Ala	tgt Cys 314	gga Gly	Gly aaa	gat Asp	gga Gly	ttt Phe 319	act Thr	cag Gln	tcc Ser	aac Asn	ttt Phe 324	1436
gat Asp	ggc Gly	tgc Cys	atc Ile	act Thr	tct Ser	gcc Ala	cta Leu	tgt Cys	gtt Val	ctg Leu	gaa Glu	gct Ala	tta Leu	aag Lys	aat Asn	1484

325	3	30	335		340	
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ttcttcactt	attatcattt	ttcatgtgga	gtataaaatc	aattttgtaa	ttttgatagt	1660
tacaacccat	gctagaatgg	aaattcctca	caccttgcac	cttccctact	tttctgaatt	1720
gctatgacta	ctccttgttg	gaggaaaagt	ggtacttaaa	aaataacaaa	cgactctctc	1780
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cac	gcgt	ccg	ccca	cgcg	tc c	ggcg	gctg	t cg	cc	Ме	g tt t Le 1	g tc u Se	g gt r Va	a gc l Al	a gcc a Ala	112
cgc Arg 7	tcg Ser	Gly	ccg Pro	ttc Phe	gcg Ala 12	ccc Pro	gtc Val	ctg Leu	tcg Ser	gcc Ala 17	acc Thr	ccg Pro	gag Glu	cag Gln	cct Pro 22	160
gtg Val 23	ttg Leu	gac Asp	ctg Leu	aag Lys	cgg Arg 28	ccc Pro	ttc Phe	ctc Leu	agc Ser	cgg Arg 33	gag Glu	tcg Ser	ctg Leu	agc Ser	ggc 38	208
cag Gln 39	gcc Ala	gtg Val	cgc Arg	cgg Arg	cct Pro 44	ttg Leu	gtc Val	gcc Ala	tcc Ser	gtg Val 49	ggc Gly	ctc Leu	aat Asn	gtc Val	cct Pro 54	256
gct Ala 55	tct Ser	gtt Val	tgt Cys	tat Tyr	tcc Ser 60	cac His	aca Thr	gac Asp	atc Ile	aag Lys 65	gtg Val	cct Pro	gac Asp	ttc Phe	tct Ser 70	304

gaa Glu 71	Tyr	cgc Arg	cgc Arg	ctt Leu	gaa Glu 76		tta Leu	gat Asp	agt Ser	acg Thr 81	Lys	tct Ser	tca Ser	aga Arg	gaa Glu 86	352
agc Ser 87	agc Ser	gag Glu	gct Ala	agg Arg	aaa Lys 92	ggt Gly	ttc Phe	tcc Ser	tat Tyr	ttg Leu 97	gta Val	act Thr	gga Gly	gta Val	act Thr 102	400
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tcc Ser 119	agc Ser	atg Met	agt Ser	gct Ala	tct Ser 124	gct Ala	gat Asp	gtg Val	ttg Leu	gcc Ala 129	ctg Leu	gcg Ala	aaa Lys	atc Ile	gaa Glu 134	496
atc Ile 135	aag Lys	tta Leu	tcc Ser	gat Asp	att Ile 140	cca Pro	gaa Glu	ggc	aag Lys	aac Asn 145	atg Met	gct Ala	ttc Phe	aaa Lys	tgg Trp 150	544
aga Arg 151	ggc Gly	aaa Lys	ccc Pro	ctg Leu	ttt Phe 156	gtg Val	cgt Arg	cat His	aga Arg	acc Thr 161	cag Gln	aag Lys	gaa Glu	att Ile	gag Glu 166	592
cag Gln 167	gaa Glu	gct Ala	gca Ala	gtt Val	gaa Glu 172	tta Leu	tca Ser	cag Gln	ttg Leu	agg Arg 177	gac Asp	cca Pro	cag Gln	cat His	gat Asp 182	640
cta Leu 183	gat Asp	cga Arg	gta Val	aag Lys	aaa Lys 188	cct Pro	gaa Glu	tgg Trp	gtt Val	atc Ile 193	ctg Leu	ata Ile	ggt Gly	gtt Val	tgc Cys 198	688
act Thr 199	cat His	ctt Leu	ggc Gly	tgt Cys	gta Val 204	ccc Pro	att Ile	gca Ala	aat Asn	gca Ala 209	gga Gly	gat Asp	ttt Phe	ggt Gly	ggt Gly 214	736
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aga Arg 231	ttg Leu	ggt Gly	cct Pro	gct Ala	cct Pro 236	ctc Leu	aac Asn	ctt Leu	gaa Glu	gtc Val 241	ccc Pro	acg Thr	tat Tyr	gag Glu	ttc Phe 246	832
acc Thr 247	agt Ser	gac Asp	gat Asp	atg Met	gtg Val 252	att Ile	gtt Val	ggt Gly	taa *	g ag	actt	ggac	tca	agto	ata	883
ggct	tctt	tc a	gtct	ttat	g to	acct	cagg	aga	ctta	ttt	gaga	ggaa	gc c	ttct	gtact	943
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aatt	gaat	tt a	atgt	tgaa	t ac	tttc	aggc	att	ccct	taa	taaa	gacc	ct g	ttaa	gccca	1063
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aag Lys 178	Lys	gct Ala	tct Ser	cct Pro	gaa Glu 183	gta Val	aaa Lys	tca Ser	tgt Cys	gac Asp 188	Ser	ttt Phe	gtg Val	ı tgt . Cys	gaa Glu 193	631
gtt Val 194	Gly	cta Leu	ggt Gly	aac Asn	tca Ser 199	Ser	tct Ser	aat Asn	atg Met	aac Asn 204	Ile	aga Arg	ggt Gly	gac Asp	act Thr 209	679
gga Gly 210	cac His	aag Lys	gca Ala	tgt Cys	gaa Glu 215	tgt Cys	cag Gln	gaa Glu	tat Tyr	gga Gly 220	cca Pro	aag Lys	cca Pro	tgg Trp	aag Lys 225	727
agt Ser 226	caa Gln	caa Gln	cct Pro	aaa Lys	aaa Lys 231	gcc Ala	ttc Phe	aga Arg	tat Tyr	cac His 236	ccc Pro	tcc Ser	ttg Leu	aga Arg	aca Thr 241	775
caa Gln 242	gaa Glu	agg Arg	gat Asp	cac His	act Thr 247	gga Gly	aag Lys	aaa Lys	ccc Pro	tat Tyr 252	gct Ala	tgt Cys	aaa Lys	gaa Glu	tgt Cys 257	823
gga Gly 258	aaa Lys	aac Asn	att Ile	att Ile	tac Tyr 263	cat His	tca Ser	agc Ser	att Ile	caa Gln 268	aga Arg	cac His	atg Met	gta Val	gtg Val 273	871
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aaa Lys 306	ccg Pro	tat Tyr	gaa Glu	tgt Cys	aaa Lys 311	caa Gln	tgt Cys	ggt Gly	aaa Lys	tct Ser 316	ttt Phe	agt Ser	tat Tyr	tct Ser	gct Ala 321	1015
acc Thr 322	cat His	cga Arg	ata Ile	cat His	gaa Glu 327	aga Arg	act Thr	cac His	att Ile	gga Gly 332	gaa Glu	aag Lys	cct Pro	tat Tyr	gaa Glu 337	1063
tgt Cys 338	cag Gln	gaa Glu	tgt Cys	gjà aaa	aaa Lys 343	gca Ala	ttc Phe	cat His	agt Ser	ccc Pro 348	aga Arg	tcc Ser	tgt Cys	cac His	aga Arg 353	1111
cat His 354	gaa Glu	agg Arg	agt Ser	His	atg Met 359	gga Gly	gag Glu	aag Lys	Ala	tat Tyr 364	caa Gln	tgt Cys	aag Lys	gaa Glu	tgt Cys 369	1159
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His 386		Arg	l Lys	Lys	Leu 391		Glu	Cys	Lys	Gln 396	-	Gly	Lys	Ala	Leu 401	
	Ser					Gln					Met				gaa Glu 417	1303
	Pro		gaa Glu								Phe					1351
	Phe		aga Arg								Glu					1399
	Lys		tgt Cys													1447
			act Thr													1495
999 Gly 482	aaa Lys	gcc Ala	ttc Phe	aga Arg	tct Ser 487	gcc Ala	cca Pro	aat Asn	ctt Leu	caa Gln 492	tcg Ser	cat His	ggt Gly	agg Arg	act Thr 497	1543
cac His 498	act Thr	gga Gly	gag Glu	aaa Lys	ccg Pro 503	tat Tyr	caa Gln	tgt Cys	aag Lys	gaa Glu 508	tgt Cys	gly aaa	aaa Lys	gct Ala	ttc Phe 513	1591
			tca Ser													1639
			gaa Glu													1687
aac Asn 546	ttt Phe	cga Arg	ttt Phe	cat His	gaa Glu 551	agg Arg	aca Thr	cac His	aat Asn	gga Gly 556	gag Glu	aaa Lys	ccc Pro	tat Tyr	gaa Glu 561	1735
tgt Cys 562	aaa Lys	gaa Glu	tgc Cys	aga Arg	aaa Lys 567	gca Ala	ttc Phe	agc Ser	ttg Leu	cct Pro 572	act Thr	tcc Ser	ttt Phe	cat His	aga Arg 577	1783
cat His 578	gaa Glu	aag Lys	aca Thr	ttg Leu	gaa Glu 583	gga Gly	aac Asn	cct Pro	atg Met	aag Lys 588	gca Ala	agc Ser	aat Asn	gtg Val	gca Ala 593	1831
aag Lys 594	ctt Leu	tca Ser	ctt Leu	ctt Leu	cca Pro 599	gtt Val	ctt Leu	ttc Phe	aat Asn	atc Ile 604	atg Met	aaa Lys	gaa Glu	ttc Phe	aca Thr 609	1879
ctg Leu	gly aaa	aga Arg	aac Asn	cct Pro	atc Ile	agt Ser	gta Val	agc Ser	aat Asn	gtg Val	cga Arg	aag Lys	cct Pro	tta Leu	ttt Phe	1927

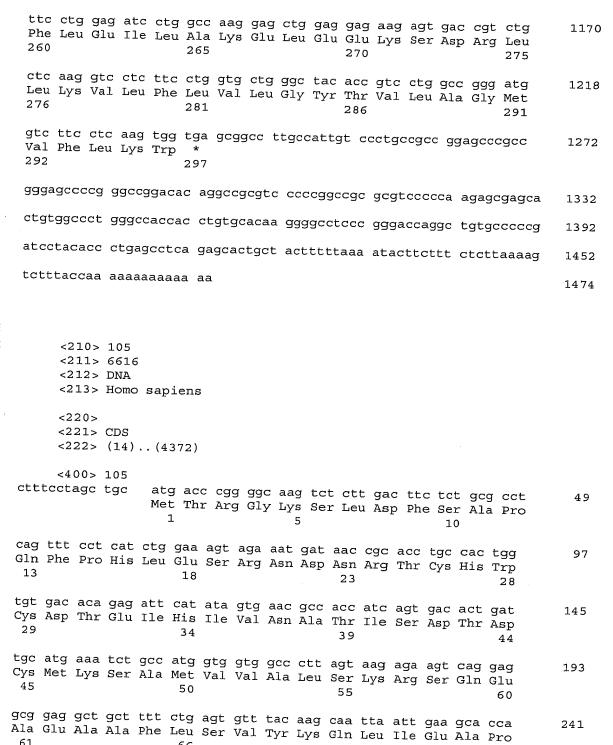
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289

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82

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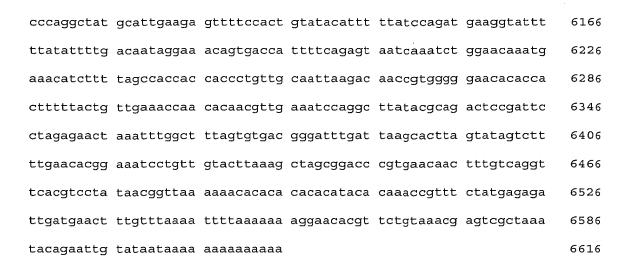
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And the series					Tyr					Tyr					acc Thr		3505
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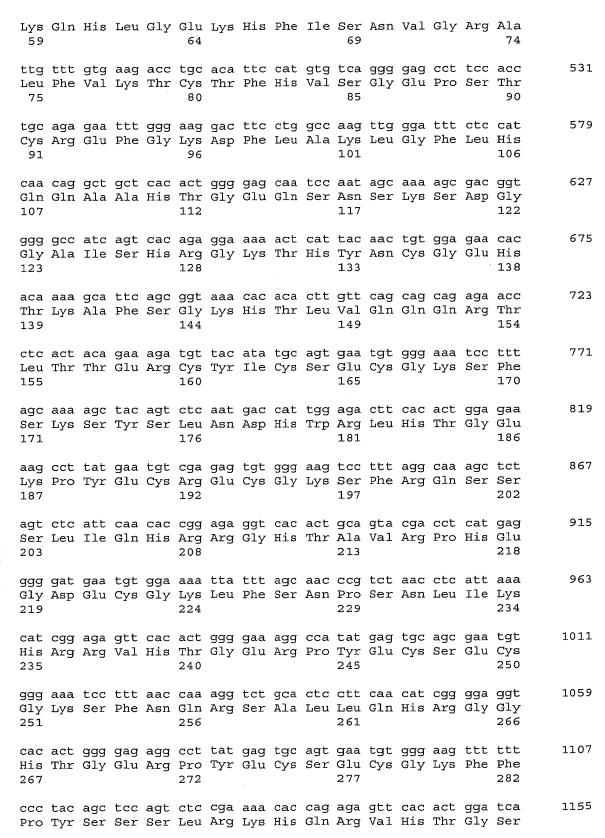
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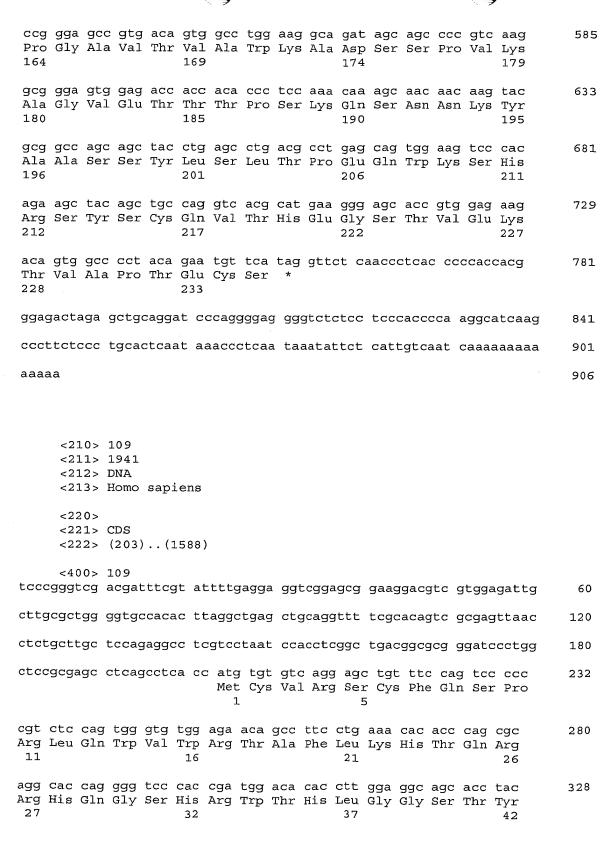
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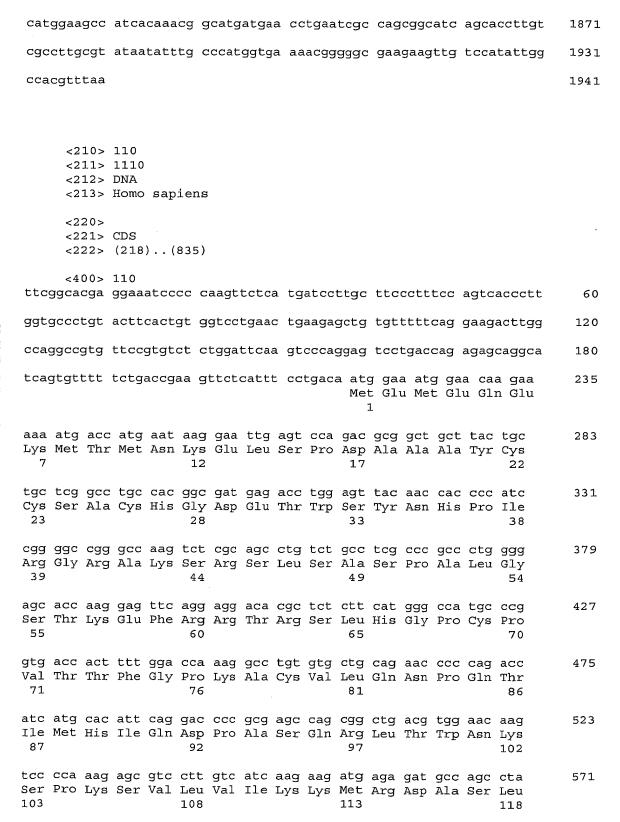
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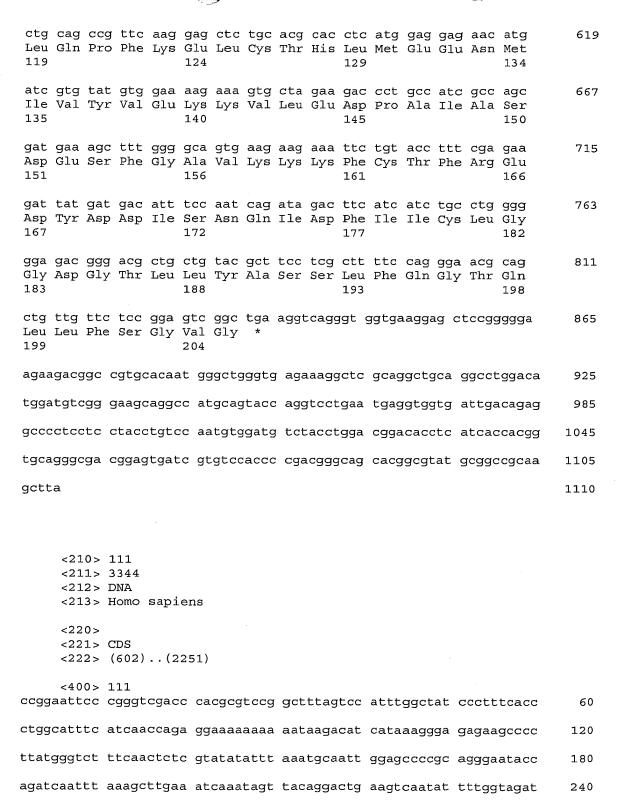
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ctg tgc aaa att cac agt gtg gat ctg cag gct gtg gga ctt gaa gac Leu Cys Lys Ile His Ser Val Asp Leu Gln Ala Val Gly Leu Glu Asp 395 400 405 410	1432
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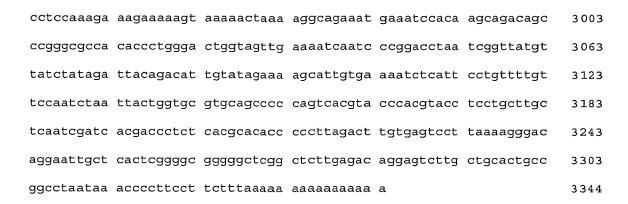


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tct Ser 384	ctc Leu	act Thr	gtc Val	act Thr	tca Ser 389	tgt Cys	tat Tyr	gta Val	tgt Cys	gga Gly 394	gga Gly	act Thr	gta Val	ata Ile	gca Ala 399	1798
gat Asp 400	caa Gln	tgg Trp	cca Pro	Trp	gaa Glu 405	gcc Ala	cga Arg	gaa Glu	Leu	gta Val 410	cct Pro	aca Thr	gac Asp	cca Pro	gtt Val 415	1846

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81

86

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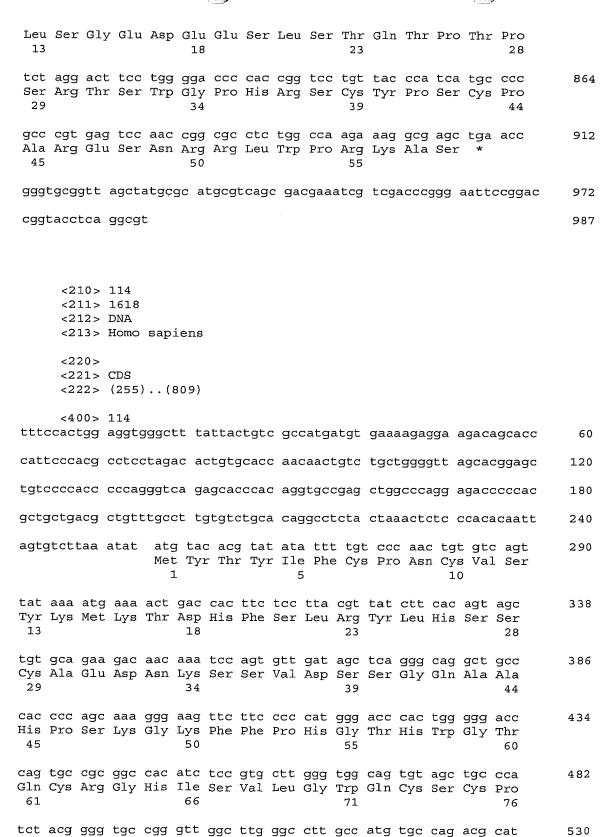
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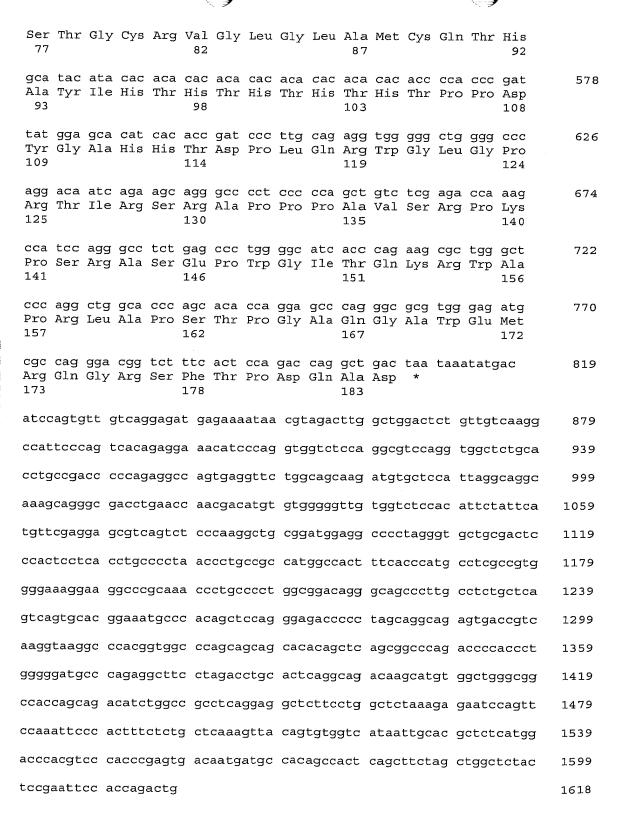
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816





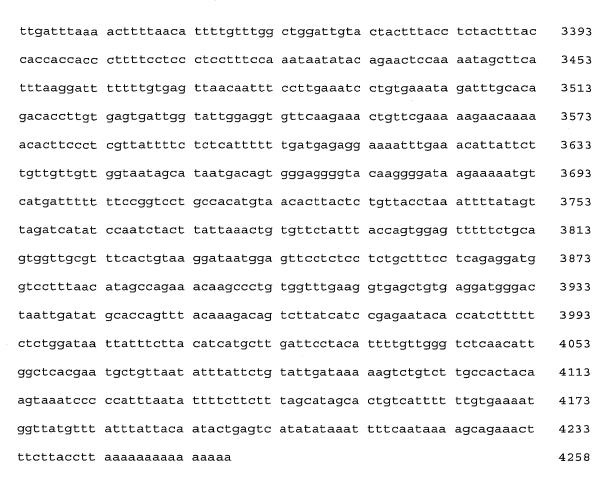
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				act Thr 216									_	727
				gaa Glu 232	 _			_	_	_	_	_		775
				aaa Lys 248										823
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	_		_	aag Lys 280		_	_	_		_		-		919
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caa Gln 419	Glu	aaa Lys	ttc Phe	tat Tyr	gca Ala 424	gag Glu	ctt Leu	agt Ser	gat Asp	ctg Leu 429	aag Lys	cgg Arg	gag Glu	cct Pro	gaa Glu 434	1351
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	a agt ı Ser l		_		-	-		_	-		_	_	_		_	2	167
_	cgt Arg	_			_	_	_	_				_	_		-	2	215
	ccc Pro															2	263
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	g atc 1 Ile 5															2	359
	ı gaa ı Glu		_		_			_			_	-	_		_	2	407
	g aag Lys															2	455
	tcc Ser															2.	503
	aaa Lys	-				_				_	_					2	551
	gaa Glu	_					_					_			-	2	599
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		atg Met															2695
		gag Glu	_	_				_		_		_			_	_	2743
		gtg Val															2791
		ttg Leu						_		-					_	_	2839
A CONTRACTOR OF THE PERSON OF		ctg Leu						_			-	_					2887
il Amar eros thailt a		gaa Glu															2935
erred thus inse the	_	aaa Lys		_				_	_		_				_	-	2983
Orac dust		gaa Glu															3031
World Yearly Study M		gca Ala			Ala					Gln					Gln		3079
		cgc Arg			Leu					Leu					Asn		3127
		gat Asp			Val					Ala					Ala		3175
		gaa Glu			His					Leu					Gly		3223
		gcc Ala			Glu					Leu		tag *	ccat	cag	gatca	gaa	3273
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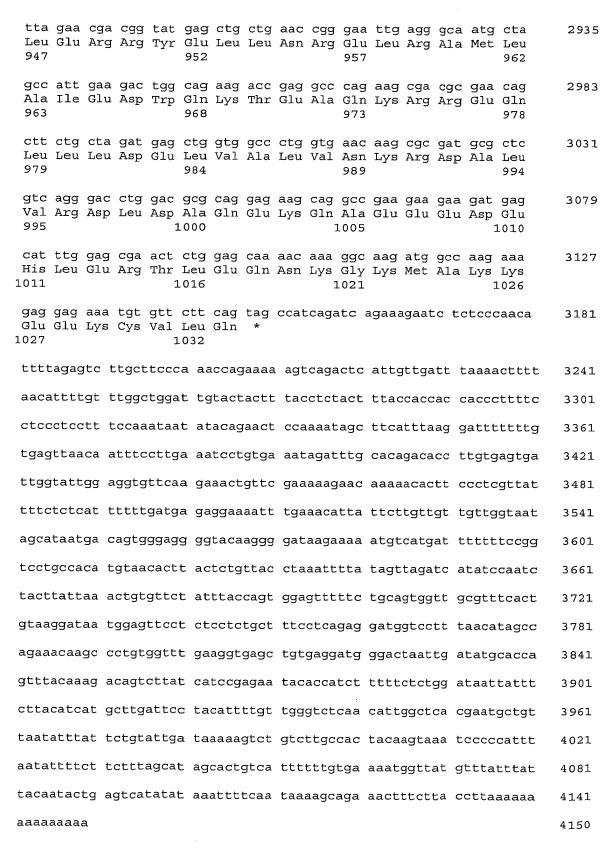
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							aga Arg										295
							aaa Lys				-	_	_	_	_	_	343
							tca Ser										391
Healt Mark							gat Asp										439
s Seed Smar coult to							aca Thr										487
teest that thus							cag Gln										535
of the speech that							acc Thr										583
Altanta Street							cct Pro										631
							gaa Glu										679
		_					cct Pro					_	_			_	727
							agg Arg										775
		~					aca Thr		_			_			_		823
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Ala 259	Gly	Lys	Asp	Leu	Ser 264	Thr	Ser	Pro	Lys	Pro 269	Ser	Pro	Ile	Pro	Ser 274	
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_		_	_		_			_		_				aat Asn		967
		_		_						_	_			cac His		1015
	_					_		_		_				gat Asp		1063
					_	_		_			-			gga Gly		1111
	_		_	_			_	_	_			_		cct Pro	_	1159
	_		_	_								_		ttc Phe	_	1207
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	-				_			_	-		_			cct Pro	_	1351
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gag Glu 531	Thr	tta Leu	ı gaa ı Glu	ttg Leu	agt Ser 536	Asp	tta Leu	ı tat ı Tyr	gtt Val	agt Ser 541	: Asp	aag Lys	g aag E Lys	g aag Lys	g gat s Asp 546	1687
atg Met 547	Ser	cca Pro	ccc Pro	ttt Phe	att Ile 552	Cys	gag Glu	gag Glu	aca Thr	gat Asp 557	Glu	caa Glr	ı aaçı ı Lys	ctt Leu	caa Gln 562	1735
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agt Ser 595	tta Leu	tct Ser	cct Pro	act Thr	tct Ser 600	aaa Lys	ctt Leu	gga Gly	tac Tyr	tca Ser 605	tat Tyr	agt Ser	aga Arg	gat Asp	cta Leu 610	1879
gac Asp 611	ctt Leu	gct Ala	aag Lys	aaa Lys	aaa Lys 616	cat His	gct Ala	tcc Ser	ctg Leu	agg Arg 621	cag Gln	acg Thr	gag Glu	tct Ser	gat Asp 626	1927
cca Pro 627	gat Asp	gct Ala	gat Asp	aga Arg	acc Thr 632	act Thr	tta Leu	aat Asn	cat His	gca Ala 637	gat Asp	cat His	tca Ser	tca Ser	aaa Lys 642	1975
ata Ile 643	gtc Val	cag Gln	cat His	cga Arg	ttg Leu 648	tta Leu	tct Ser	aga Arg	caa Gln	gaa Glu 653	gaa Glu	ctt Leu	aag Lys	gaa Glu	aga Arg 658	2023
gca Ala 659	aga Arg	gtt Val	ctg Leu	ctt Leu	gag Glu 664	caa Gln	gca Ala	aga Arg	aga Arg	gat Asp 669	gca Ala	gcc Ala	tta Leu	aag Lys	gcg Ala 674	2071
999 Gly 675	aat Asn	aag Lys	cac His	aat Asn	acc Thr 680	aac Asn	aca Thr	gcc Ala	acc Thr	cca Pro 685	ttc Phe	tgc Cys	aac Asn	agg Arg	cag Gln 690	2119
cta Leu 691	agt Ser	gat Asp	cag Gln	caa Gln	gat Asp 696	gaa Glu	gag Glu	cga Arg	cgt Arg	cgg Arg 701	cag Gln	ctg Leu	aga Arg	gag Glu	aga Arg 706	2167
gct Ala 707	cgt Arg	cag Gln	cta Leu	Ile	gca Ala 712	gaa Glu	gct Ala	cga Arg	tct Ser	gga Gly 717	gtg Val	aag Lys	atg Met	tca Ser	gaa Glu 722	2215

					atg Met								2263
					aac Asn								2311
					cca Pro								2359
					gag Glu								2407
	_	_			gaa Glu	_				-	_		2455
And the ten					agc Ser								2503
ne these tenti tente	_		_		tat Tyr			_		_			2551
Pardi Manne Three	 _		_	_	gat Asp		_					-	2599
and the then					agg Arg								2647
A), 17113;			_		agt Ser	_		 _	 _	_	_	_	2695
					caa Gln								2743
					atg Met								2791
					tgg Trp								2839
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cac His 162	cac His	cca Pro	aca Thr	ttc Phe	tac Tyr 167	aag Lys	aaa Lys	atc Ile	cac His	aag Lys 172	aaa Lys	cac His	cat His	gag Glu	tgg Trp 177	584
aca Thr 178	gct Ala	ccc Pro	att Ile	ggc Gly	gtg Val 183	atc Ile	tct Ser	ctc Leu	tat Tyr	gcc Ala 188	cac His	cct Pro	ata Ile	gag Glu	cat His 193	632
gca Ala 194	gtc Val	tcc Ser	aac Asn	atg Met	cta Leu 199	ccg Pro	gtg Val	ata Ile	gtg Val	ggc Gly 204	cca Pro	tta Leu	gta Val	atg Met	ggc Gly 209	680
tcc Ser 210	cac His	ttg Leu	tcc Ser	tcc Ser	atc Ile 215	acc Thr	atg Met	tgg Trp	ttt Phe	tcc Ser 220	ttg Leu	gcc Ala	ctc Leu	atc Ile	atc Ile 225	728
acc Thr 226	acc Thr	atc Ile	tcc Ser	cac His	tgt Cys 231	gly	tac Tyr	cac His	ctt Leu	ccc Pro 236	ttc Phe	ctg Leu	cct Pro	tcg Ser	cct Pro 241	776
gaa Glu 242	ttc Phe	cac His	gac Asp	tac Tyr	cac His 247	cat His	ctc Leu	aag Lys	ttc Phe	aac Asn 252	cag Gln	tgc Cys	tat Tyr	gly 333	gtg Val 257	824
ctg Leu 258	ggt Gly	gtg Val	ctg Leu	gac Asp	cac His 263	ctc Leu	cat His	gly aaa	act Thr	gac Asp 268	acc Thr	atg Met	ttc Phe	aag Lys	cag Gln 273	872
acc Thr 274	aag Lys	gcc Ala	tac Tyr	gag Glu	aga Arg 279	cat His	gtc Val	ctc Leu	ctg Leu	ctg Leu 284	ggc Gly	ttc Phe	acc Thr	ccg Pro	ctc Leu 289	920
tct Ser 290	gag Glu	agc Ser	atc Ile	Pro	gac Asp 295	tcc Ser	cca Pro	aag Lys	Arg	atg Met 300	gag Glu	tga *	gaga	cago	ct	969
aagt	gtca	tc c	tggc	tgtc	c ct	cago	catg	gga	tgca	gac	acgg	cttc	ct g	attg	cacct	1029
aaca	attt	gc c	tcct	tcgg	c ca	cacg	ccct	aat	gatg	gca	ccac	cagg	gt a	gagg	gaagg	1089
tagg	cttc	cc g	gaaa	agca	a aa	ccaa	ggat	gag	gctt	tct	tcaa	acta	ct g	ccct	tgatg	1149
tccc	tcaa	tg g	gatc	agga	g tt	agct	taag	aaa	aagg	aaa	acac	agct	cc c	caga	ctgga	1209
ggct	ggtc	ag a	ggga	ggag	a cc	cctg	gtcc	tct	gctg	tgg	aagg	agag	aa a	ttca	gcccc	1269
agata	aact	cc t	ttgt	ggcc	t ggg	gcag	gatg	cag	agaa	tga	caag	gctg	aa a	ggag	gggga	1329
ctgga	aggc	tg c	ctgg	ctcc	a gc	gagag	gctc	ctt	ctgg	gac	caga	gggt	39 g			1380

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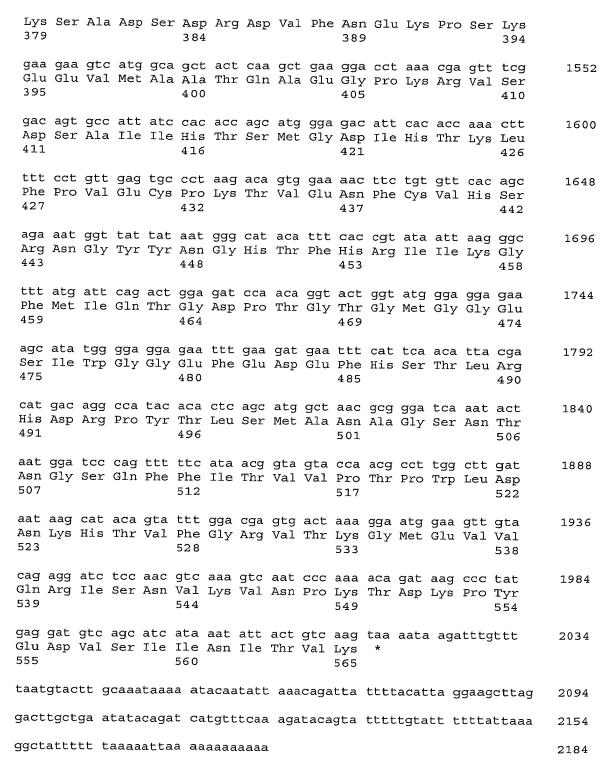
<213> Homo sapiens

149

Lys Leu His Thr Ser Pro Leu Thr Gln Ile Arg Leu Asn Pro Val Tyr

144

aa Ly 15	s Ala	a gta a Val	a gtg l Val	g tct L Sei	tct Ser 160	: Asp	aaa Lys	a tct s Ser	Gly	y ato Met 165	: Ile	gaa Glu	a tad 1 Tyl	tgg Trp	act Thr 170	832
999 Gl	y Pro	cct Pro	cat His	gaa Glu	tat Tyr 176	Lys	tto Phe	c ccc Pro	aaa Lys	aat Asr 181	ı Val	aac Asr	tgg Trp	g gaa Glu	tat Tyr 186	880
aaa Ly: 18'	s Thr	gac Asp	act Thr	gat Asp	tta Leu 192	Tyr	gaa Glu	tttı Phe	gcc	aag Lys 197	Cys	aag Lys	gct Ala	tat Tyr	cca Pro 202	928
aco Thi 203	Ser	gta Val	ı tgt . Cys	ttt Phe	tca Ser 208	Pro	gat Asp	ggg Gly	aag Lys	aaa Lys 213	Ile	gct Ala	act Thr	att Ile	ggt Gly 218	976
tct Sei 219	: Asp	aga Arg	aaa Lys	gtt Val	aga Arg 224	att Ile	ttc Phe	aga Arg	ttt Phe	gta Val 229	act Thr	ggá Gly	aaa Lys	ctc Leu	atg Met 234	1024
aga Arg 235	y Val	ttt Phe	gat Asp	gaa Glu	tca Ser 240	cta Leu	agc Ser	atg Met	ttt Phe	act Thr 245	gaa Glu	ctg Leu	caa Gln	cag Gln	atg Met 250	1072
agg Arg 251	ß Gln	cag Gln	tta Leu	cca Pro	gac Asp 256	atg Met	gaa Glu	ttt Phe	ggc Gly	cga Arg 261	cga Arg	atg Met	gct Ala	gta Val	gaa Glu 266	1120
cgt Arg 267	Glu	ttg Leu	gag Glu	aag Lys	gtt Val 272	gat Asp	gct Ala	gta Val	aga Arg	tta Leu 277	att Ile	aat Asn	ata Ile	gtt Val	ttt Phe 282	1168
gat Asp 283	Glu	act Thr	gga Gly	cac His	ttc Phe 288	gtg Val	ctg Leu	tat Tyr	gga Gly	aca Thr 293	atg Met	ctg Leu	ggc Gly	att Ile	aaa Lys 298	1216
gtt Val 299	Ile	aat Asn	gta Val	gag Glu	aca Thr 304	aac Asn	cgg Arg	tgt Cys	gtg Val	cgg Arg 309	att Ile	tta Leu	ggc Gly	aaa Lys	caa Gln 314	1264
gaa Glu 315	aat Asn	att Ile	aga Arg	gtg Val	atg Met 320	caa Gln	ttg Leu	gct Ala	ttg Leu	ttc Phe 325	cag Gln	gjå aaa	ata Ile	gcc Ala	aaa Lys 330	1312
aag Lys 331	cat His	cgt Arg	gct Ala	gca Ala	act Thr 336	act Thr	ata Ile	gaa Glu	atg Met	aaa Lys 341	gct Ala	tct Ser	gaa Glu	aat Asn	cct Pro 346	1360
gtt Val 347	ctt Leu	cag Gln	aat Asn	att Ile	caa Gln 352	gct Ala	gac Asp	cca Pro	aca Thr	ata Ile 357	gtc Val	tgt Cys	aca Thr	tca Ser	ttc Phe 362	1408
aaa Lys 363	aag Lys	aat Asn	aga Arg	ttt Phe	tat Tyr 368	atg Met	ttt Phe	acc Thr	aaa Lys	cga Arg 373	gaa Glu	cca Pro	gaa Glu	gat Asp	acg Thr 378	1456
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<210> 119

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Gl <sub>)</sub>	y Se: 7	r Ar	g Va	l Gl	y Vai 162		Pro	) Let	ı Ile	e Ile 167		o Thi	r Asp	р Туг	r Trp 172	
аад Lys 17:	з ГУ:	a atq s Mei	g gc	c aaa a Lys	a gti s Val 178	l Leı	g aga ı Arç	a agt g Ser	gcc Ala	ggo Gly 183	/ His	Cac His	c cto s Lei	c att	cct Pro 188	639
gto Val 189	L Lys	g gag s Glu	g aad 1 Asi	c cto n Leo	gtt Val 194	. Asr	aaa Lys	atc Ile	tgg Trp	aca Thr	Asp	c cgt o Arg	cct Pro	gag Glu	g cgc 1 Arg 204	687
cct Pro 205	о Суя	c aag B Lys	g cct s Pro	t cto Leu	cto Lev 210	ı Thr	ctg Leu	ggc Gly	ctg Leu	gat Asp 215	Туг	aca Thr	ggc Gly	ato Ile	tcc Ser 220	735
tgg Trp 221	ь Гля	gac Asp	aag Lys	g gtt Val	gca Ala 226	Asp	ctt Leu	cgg Arg	ttg Leu	aaa Lys 231	Met	gct Ala	gag Glu	agg Arg	aac Asn 236	783
gto Val 237	Met	tgg Trp	ttt Phe	gtg Val	gtc Val 242	Thr	gcc Ala	ttg Leu	gat Asp	gag Glu 247	Ile	gcg Ala	tgg Trp	cta Leu	ttt Phe 252	831
aat Asn 253	. Leu	cga Arg	gga Gly	tca Ser	gat Asp 258	gtg Val	gag Glu	cac His	aat Asn	cca Pro 263	gta Val	ttt Phe	ttc Phe	tcc Ser	tac Tyr 268	879
gca Ala 269	Ile	ata Ile	gga Gly	cta Leu	gag Glu 274	acg Thr	atc Ile	atg Met	ctc Leu	ttc Phe 279	att Ile	gat Asp	ggt Gly	gac Asp	cgc Arg 284	927
ata Ile 285	gac Asp	gcc Ala	ccc Pro	agt Ser	gtg Val 290	aag Lys	gag Glu	cac His	ctg Leu	ctt Leu 295	ctt Leu	gac Asp	ttg Leu	ggt Gly	ctg Leu 300	975
gaa Glu 301	gcc Ala	gaa Glu	tac Tyr	agg Arg	atc Ile 306	cag Gln	gtg Val	cat His	ccc Pro	tac Tyr 311	aag Lys	tcc Ser	atc Ile	ctg Leu	agc Ser 316	1023
gag Glu 317	ctc Leu	aag Lys	gcc Ala	ctg Leu	tgt Cys 322	gct Ala	gac Asp	ctc Leu	tcc Ser	cca Pro 327	agg Arg	gag Glu	aag Lys	gtg Val	tgg Trp 332	1071
gtc Val 333	agt Ser	gac Asp	aag Lys	gcc Ala	agc Ser 338	tat Tyr	gct Ala	gtg Val	agc Ser	gag Glu 343	acc Thr	atc Ile	ccc Pro	aag Lys	gac Asp 348	1119
cac His 349	cgc Arg	tgc Cys	tgt Cys	atg Met	cct Pro 354	tac Tyr	acc Thr	ccc Pro	atc Ile	tgc Cys 359	atc Ile	gcc Ala	aaa Lys	gct Ala	gtg Val 364	1167
aag Lys 365	aat Asn	tca Ser	gct Ala	gag Glu	tca Ser 370	gaa Glu	Gly ggc	atg Met	Arg	cgg Arg 375	gct Ala	cac His	att Ile	aaa Lys	gat Asp 380	1215
gct Ala	gtt Val	gct Ala	ctc Leu	tgt Cys	gaa Glu	ctc Leu	ttt Phe	aac Asn	tgg Trp	ctg Leu	gag Glu	aaa Lys	gag Glu	gtt Val	ccc Pro	1263

38:	1				386	5				39	1				396	
ааа Lys 397	3 Gly	z ggt / Glz	gtg Val	g aca	a gag Glu 402	ı Ile	tca Sei	a gct r Ala	gct Ala	gao Asj 40'	э Гуя	a gci	t gag a Gli	g gag ı Glı	g ttt ı Phe 412	1311
cgo Arg 413	y Arc	g caa g Glr	a cag n Glr	g gca Ala	a gac a Asp 418	Phe	gto Val	g gac L Asp	cto Lei	g ago 1 Sei 423	c Phe	c cca Pro	a aca o Thr	a att	tcc Ser 428	1359
agt Ser 429	Thr	. Gl <sup>y</sup> A GGs	ccc Pro	aac Asn	ggc Gly 434	Ala	ato Ile	att lle	cac His	tac Tyi 439	: Ala	g cca	a gto Val	cct Pro	gag Glu 444	1407
acg Thr 445	· Asn	agg Arg	acc Thr	ttg Leu	s tcc Ser 450	ctg Leu	gat Asp	gag Glu	gtg Val	tac Tyr 455	Leu	att Ile	gac Asp	tc <u>o</u> Ser	ggt Gly 460	1455
gct Ala 461	Gln	tac Tyr	aag Lys	gat Asp	ggc Gly 466	acc Thr	aca Thr	gat Asp	gtg Val	acc Thr 471	Arg	aca Thr	atg Met	cat His	ttt Phe 476	1503
999 Gly 477	Thr	cct Pro	aca Thr	gcc Ala	tac Tyr 482	gag Glu	aag Lys	gaa Glu	tgc Cys	tto Phe 487	Thr	tat Tyr	gtc Val	ctc Leu	aag Lys 492	1551
ggc Gly 493	cac His	ata Ile	gct Ala	gtg Val	agt Ser 498	gca Ala	gcc Ala	gtt Val	ttc Phe	ccg Pro 503	act Thr	gga Gly	acc Thr	aaa Lys	ggt Gly 508	1599
cac His 509	ctt Leu	ctt Leu	gac Asp	tcc Ser	ttt Phe 514	gcc Ala	cgt Arg	tca Ser	gct Ala	tta Leu 519	tgg Trp	gat Asp	tca Ser	ggc Gly	cta Leu 524	1647
gat Asp 525	tac Tyr	ttg Leu	cac His	Gly aaa	act Thr 530	gga Gly	cat His	ggt Gly	gtt Val	999 535	tct Ser	ttt Phe	ttg Leu	aat Asn	gtc Val 540	1695
cat His 541	gag Glu	ggt Gly	cct Pro	tgc Cys	ggc Gly 546	atc Ile	agt Ser	tac Tyr	aaa Lys	aca Thr 551	ttc Phe	tct Ser	gat Asp	gag Glu	ccc Pro 556	1743
ttg Leu 557	gag Glu	gca Ala	ggc Gly	atg Met	att Ile 562	gtc Val	act Thr	gat Asp	gag Glu	ccc Pro 567	gl <sup>à</sup> aaa	tac Tyr	tat Tyr	gaa Glu	gat Asp 572	1791
999 Gly 573	gct Ala	ttt Phe	gga Gly	att Ile	cgc Arg 578	att Ile	gag Glu	aat Asn	gtt Val	gtc Val 583	ctt Leu	gtg Val	gtt Val	cct Pro	gtg Val 588	1839
aag Lys 589	acc Thr	aag Lys	tat Tyr	aat Asn	ttt Phe 594	aat Asn	aac Asn	cgg Arg	gga Gly	agc Ser 599	ctg Leu	acc Thr	ttt Phe	gaa Glu	cct Pro 604	1887
cta Leu 605	aca Thr	ttg Leu	gtt Val	cca Pro	att Ile 610	cag Gln	acc Thr	aaa Lys	atg Met	ata Ile 615	gat Asp	gtg Val	gat Asp	tct Ser	ctt Leu 620	1935

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gat gtg att ggg aag gaa ttg cag aaa cag ggc cgc cag gaa gct ctc Asp Val Ile Gly Lys Glu Leu Gln Lys Gln Gly Arg Gln Glu Ala Leu 637 642 647 652	2031
gag tgg ctc atc aga gag acg caa ccc atc tcc aaa cag cat taa taa Glu Trp Leu Ile Arg Glu Thr Gln Pro Ile Ser Lys Gln His * 653 658 663	2079
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tgtctttaag agtgattgaa gagaataatt caaa atg cct gaa aat cct gct Met Pro Glu Asn Pro Ala 1	172
aca gat aaa ctg cag gtg ctg cag gta ctt gat cgc ctg aaa atg aaa Thr Asp Lys Leu Gln Val Leu Gln Val Leu Asp Arg Leu Lys Met Lys 7 12 17 22	220
ttg cag gag aag ggt gac acg tcg cag aat gag aag tta tct atg ttt Leu Gln Glu Lys Gly Asp Thr Ser Gln Asn Glu Lys Leu Ser Met Phe 23 28 33 38	268
tat gag aca cta aag agt cct ctc ttc aac cag ata ctc aca ctt cag Tyr Glu Thr Leu Lys Ser Pro Leu Phe Asn Gln Ile Leu Thr Leu Gln 39 44 49 54	316

tgt Cys 71	Ser	gcc Ala	aac Asn	ttt Phe	gat Asp 76	Phe	tct Ser	agg Arg	g aaa g Lys	ı ggt s Gly 81	/ Let	g tta 1 Leu	gtg Val	ttc Phe	aca Thr	412
gat Asp 87	Gly	tcc Ser	att	act Thr	aat Asn 92	Gly	aat Asn	gtc Val	cac His	agg Arg	y Pro	tct Ser	aat Asn	aac Asn	tcg Ser 102	460
act Thr 103	gta Val	tct Ser	Gl <sup>A</sup> aaa	tta Leu	ttt Phe 108	Pro	tgg Trp	g acc Thr	ccg Pro	aag Lys 113	Leu	gga Gly	aat Asn	gaa Glu	gac Asp 118	508
ttt Phe 119	aac Asn	tca Ser	gtc Val	att Ile	caa Gln 124	Gln	atg Met	gct Ala	cag Gln	ggc Gly 129	Arg	caa Gln	att Ile	gaa Glu	tat Tyr 134	556
ata Ile 135	gat Asp	ata Ile	gaa Glu	cgg Arg	cct Pro 140	tca Ser	act Thr	gga Gly	ggc Gly	ctt Leu 145	Gly	ttc Phe	agt Ser	gtg Val	gtg Val 150	604
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gtc Val 167	cag Gln	cca Pro	Gly 999	agt Ser	gta Val 172	gca Ala	gac Asp	agg Arg	gat Asp	caa Gln 177	aga Arg	tta Leu	aag Lys	gaa Glu	aat Asn 182	700
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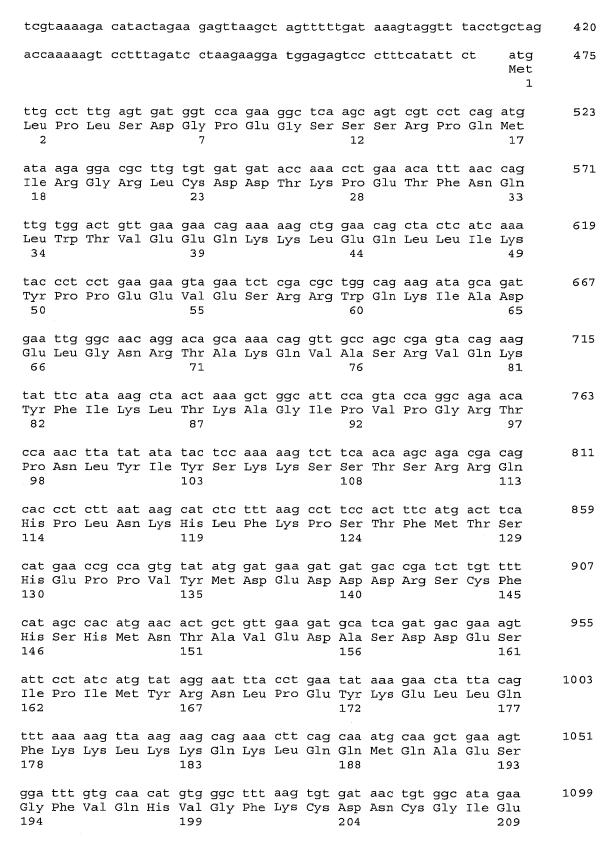
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				_	Val			_	_	gag Glu 1					Asp		4732
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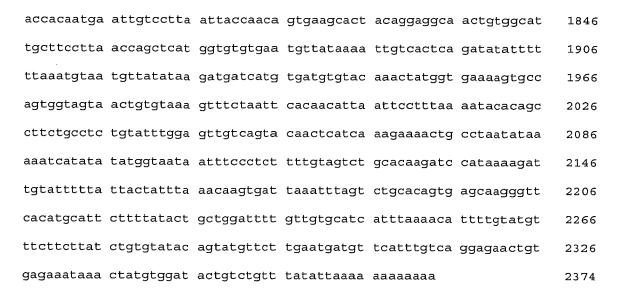
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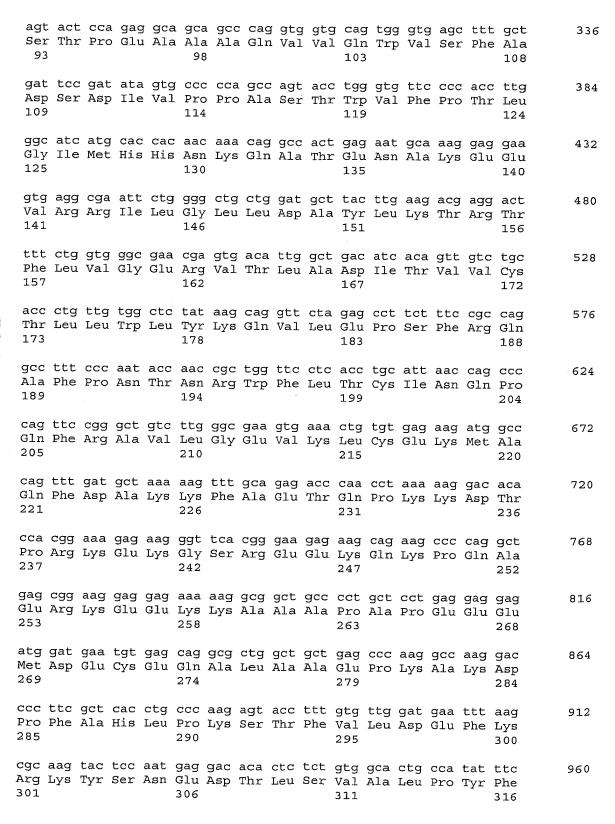
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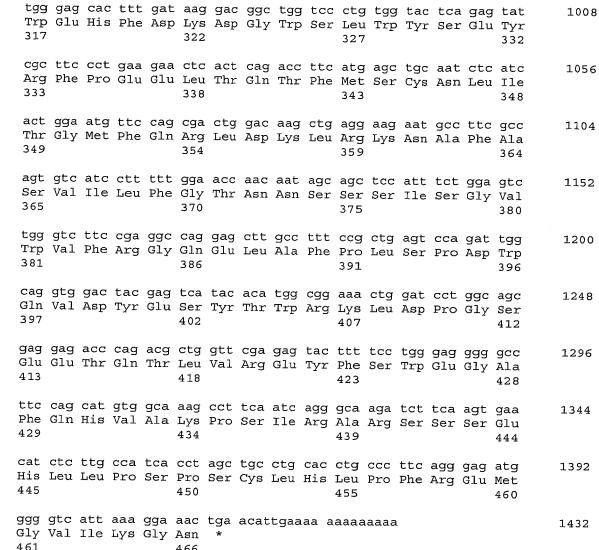
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ttc tta gac aga gac tac tgt gtg tct cag ggc acc agt tac aat tac Phe Leu Asp Arg Asp Tyr Cys Val Ser Gln Gly Thr Ser Tyr Asn Tyr 226 231 236 241	1195
ctt gac cca aac tac ttt cca gca aac aga tga catggaag agaacatcat Leu Asp Pro Asn Tyr Phe Pro Ala Asn Arg * 242 247 252	1246
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caatgatggt gtttgcttct aggatataca ctttaaaaga actcactgtc ccagtggtgg	1726
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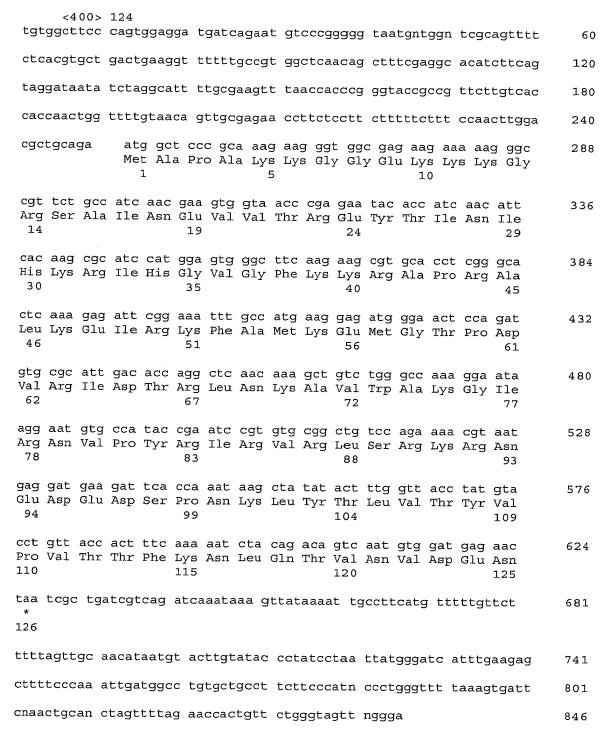




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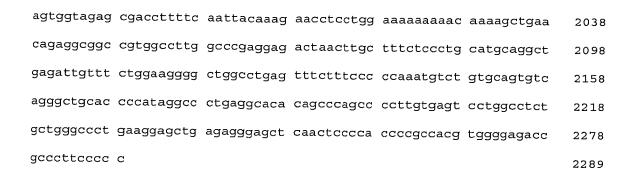
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cca Pro 40	GLy	ctc Leu	cat His	gly ggg	cag Gln 45	Pro	ggc	cct Pro	gct Ala	999 999	ccc	cct Pro	ggc Gly	tto Phe	tcc Ser 55	195
cgg Arg 56	atg Met	ggc Gly	aag Lys	gct Ala	ggt Gly 61	ccc Pro	cca Pro	gly ggg	ctc Leu	cct Pro 66	ggc	aac Asn	gto Val	Gly ggg	cca Pro 71	243
cca Pro 72	Gly 999	cag Gln	ccg Pro	gly aaa	ctt Leu 77	cgg Arg	Gly 999	gag Glu	cca Pro	gga Gly 82	ata Ile	cga Arg	gly	gac Asp	cag Gln 87	291
ggc 88	ctc Leu	cgg Arg	gga Gly	ccc Pro	cca Pro 93	gga Gly	ccc Pro	cct Pro	ggc Gly	ctc Leu 98	ccg Pro	ggc	ccc Pro	tca Ser	ggc Gly 103	339
att Ile 104	act Thr	atc Ile	cct Pro	gga Gly	aaa Lys 109	cca Pro	ggt Gly	gcc Ala	caa Gln	999 Gly 114	gtg Val	cca Pro	Gly aaa	ccc Pro	cca Pro 119	387
gga Gly 120	ttc Phe	cag Gln	gly aaa	gaa Glu	cca Pro 125	gl <sup>à</sup> aaa	ccc Pro	cag Gln	gly aaa	gag Glu 130	cct Pro	gly ggg	ccc Pro	cca Pro	ggt Gly 135	435
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999 Gly 152	gcc Ala	cca Pro	gl <sup>à</sup> aaa	cag Gln	999 Gly 157	ggt Gly	gcc Ala	ccc Pro	ggc Gly	ccc Pro 162	ccc Pro	ggc Gly	ctc Leu	cct Pro	ggt Gly 167	531
cca Pro 168	gct Ala	ggc Gly	tta Leu	ggc Gly	aaa Lys 173	cct Pro	ggt Gly	ttg Leu	qaA	999 Gly 178	ctt Leu	cct Pro	gly aaa	gcc Ala	cca Pro 183	579
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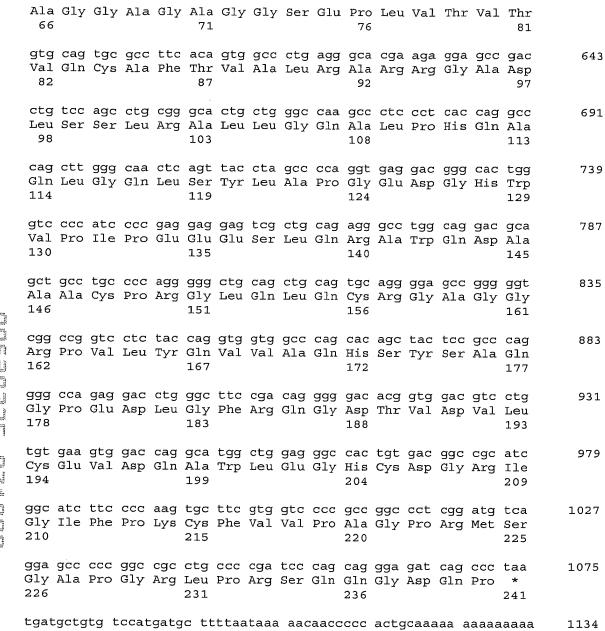
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A THE STATE OF THE	cca Pro 264	, AT	a Gly	g gto / Val	c cca L Pro	gga Gly 269	<sup>r</sup> Leu	ttg Leu	ı Gly 1 ggg	gac Asp	agg Arg 274	g Gly	c gag / Glu	g cca i Pro	a ggg	g gag Glu 279	867
Hole Him mill fluid	gat Asp 280	GTA	g gag Glu	g cca ı Pro	gly ggg	gag Glu 285	Gln	ggc	cca Pro	cag Gln	ggt Gly 290	Let	gly ggg	ggt Gly	ccc Pro	cct Pro 295	915
und Hron north	999 Gly 296	ctt Leu	cct Pro	gly ggg	tct Ser	gca Ala 301	GIY	ctt Leu	cct Pro	ggc	aga Arg 306	Arg	dly gly	ccc Pro	cct Pro	999 Gly 311	963
The Rest Call	cct Pro 312	aag Lys	ggt	gag Glu	gca Ala	999 Gly 317	cct Pro	gga Gly	gga Gly	ccc Pro	cca Pro 322	Gly	gtg Val	cct Pro	ggc	att Ile 327	1011
top last sale	cga Arg 328	ggt Gly	gac Asp	cag Gln	gly aaa	cct Pro 333	agt Ser	gjà aaa	ctg Leu	gct Ala	338 Gly aaa	aaa Lys	cca Pro	gly aaa	gtc Val	cca Pro 343	1059
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	ccc Pro 360	aag Lys	ggt Gly	gag Glu	ccg Pro	ggt Gly 365	ttc Phe	acg Thr	ggt Gly	cgc Arg	cct Pro 370	gga Gly	gga Gly	cca Pro	gjà aaa	gtg Val 375	1155
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eca Pro 440	) Arg	9 Gly	g ccc Pro	cca Pro	ggg Gly 445	Val	Pro	ggc Gly	tcc Ser	cct Pro 450	Gly	ato Ile	acg Thr	. G1 <sup>3</sup> 1. 335	g cct Pro 455	1395
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gcc Ala 568	ctg Leu	tac Tyr	aag Lys	aac Asn	aac Asn 573	gtg Val	ccg Pro	gcc Ala	acc Thr	tat Tyr 578	acc Thr	tac Tyr	gat Asp	gag Glu	tac Tyr 583	1779
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ctc Leu 632	tgc Cys	ccc Pro	aca Thr	taa *	cccg	cggg	<b>a</b> g 9	tgtc	ctgc	t gc	cctg	gcct	cct	cccc	ttt	1978

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gcggatgcac acaaatgaaa ccctcacttc aacctgaaga cattcgcaca tgagttac	gt 180
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caggcagact gcttgagccc aggagttcca gaccagcctg ggcaacatgg caacaccc	ca 420
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actcgggagg cagaggcagg aggattgctt gaacccggga ggcagaggtt gtagttagc	cc 540
gagatetege caetgeaete cagtetggae gaeagagtga gaeteagtet caaataaat	a 600
aataaataca taaatataag gaaaaaaata aagetgettt eteetettee teetettte	ıg 660
tctcatctgg ctctgctcca ggcatctgcc aca atg tgg gtg ctt aca cct gct Met Trp Val Leu Thr Pro Ala 1 5	
gct ttt gct ggg aag ctc ttg agt gtg ttc agg caa cct ctg agc tct	7.60
Ala Phe Ala Gly Lys Leu Leu Ser Val Phe Arg Gln Pro Leu Ser Ser  8 13 18 23	762
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tgg ctg cta gct acc aag agg aga aag cag cag ctg gtc ctg aga ggg Trp Leu Leu Ala Thr Lys Arg Arg Lys Gln Gln Leu Val Leu Arg Gly 40 45 50	858
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cca acc agc gtc aac tat cac ttc act cgc cag tgc aac tac aaa tgc Pro Thr Ser Val Asn Tyr His Phe Thr Arg Gln Cys Asn Tyr Lys Cys 72 77 82 87	954
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gaa gca aag aga gga ttg ctt ttg ctt aag gaa gct ggt atg gag aag Glu Ala Lys Arg Gly Leu Leu Leu Leu Lys Glu Ala Gly Met Glu Lys 104 119	1050
atc aac ttt tca ggt gga gag cca ttt ctt caa gac cgg gga gaa tac Ile Asn Phe Ser Gly Gly Glu Pro Phe Leu Gln Asp Arg Gly Glu Tyr	1098

120	)				125					130	)				135	
	Gly					Phe					ı Leu				agc Ser 151	1146
gtg Val 152	Thr	ato	gtg Val	agc Ser	aat Asn 157	Gly	ago Ser	ctg Leu	ato	cgg Arg 162	glu Glu	agg Arg	ı tg <u>e</u> Trp	tto Phe	cag Gln 167	1194
	Tyr										Ser				ttt Phe 183	1242
gac Asp 184	Glu	gaa Glu	gtc Val	aat Asn	gtc Val 189	ctt Leu	att Ile	ggc Gly	cgt Arg	ggc Gly 194	Gln	gga Gly	aag Lys	aag Lys	aac Asn 199	1290
cat His 200	gtg Val	gaa Glu	aac Asn	ctt Leu	caa Gln 205	aag Lys	ctg Leu	agg Arg	agg Arg	tgg Trp 210	tgt Cys	agg Arg	gat Asp	tat Tyr	aga Arg 215	1338
gtc Val 216	gct Ala	ttc Phe	aag Lys	ata Ile	aat Asn 221	tct Ser	gtc Val	att Ile	aat Asn	cgt Arg 226	ttc Phe	aac Asn	gtg Val	gaa Glu	gag Glu 231	1386
gac Asp 232	atg Met	acg Thr	gaa Glu	cag Gln	atc Ile 237	aaa Lys	gca Ala	cta Leu	aac Asn	cct Pro 242	gtc Val	cgc Arg	tgg Trp	aaa Lys	gtg Val 247	1434
ttc Phe 248	cag Gln	tgc Cys	ctc Leu	tta Leu	att Ile 253	gag Glu	ggt Gly	gag Glu	aat Asn	tgt Cys 258	gga Gly	gaa Glu	gat Asp	gct Ala	cta Leu 263	1482
aga Arg 264	gaa Glu	gca Ala	gaa Glu	aga Arg	ttt Phe 269	gtt Val	att Ile	ggt Gly	gat Asp	gaa Glu 274	gaa Glu	ttt Phe	gaa Glu	aga Arg	ttc Phe 279	1530
ttg Leu 280	gag Glu	cgc Arg	cac His	aaa Lys	gaa Glu 285	gtg Val	tcc Ser	tgc Cys	ttg Leu	gtg Val 290	cct Pro	gaa Glu	tct Ser	aac Asn	cag Gln 295	1578
aag Lys 296	atg Met	aaa Lys	gac Asp	tcc Ser	tac Tyr 301	ctt Leu	att Ile	ctg Leu	gat Asp	gaa Glu 306	tat Tyr	atg Met	cgc Arg	ttt Phe	ctg Leu 311	1626
aac Asn 312	tgt Cys	aga Arg	aag Lys	gga Gly	cgg Arg 317	aag Lys	gac Asp	cct Pro	tcc Ser	aag Lys 322	tcc Ser	atc Ile	ctg Leu	gat Asp	gtt Val 327	1674
ggt Gly 328	gta Val	gaa Glu	gaa Glu	gct Ala	ata Ile 333	aaa Lys	ttc Phe	agt Ser	gga Gly	ttt Phe 338	gat Asp	gaa Glu	aag Lys	atg Met	ttt Phe 343	1722
ctg Leu 344	aag Lys	cga Arg	gga Gly	gga Gly	aaa Lys 349	tac Tyr	ata Ile	tgg Trp	agt Ser	aag Lys 354	gct Ala	gat Asp	ctg Leu	aag Lys	ctg Leu 359	1770



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<212> DNA

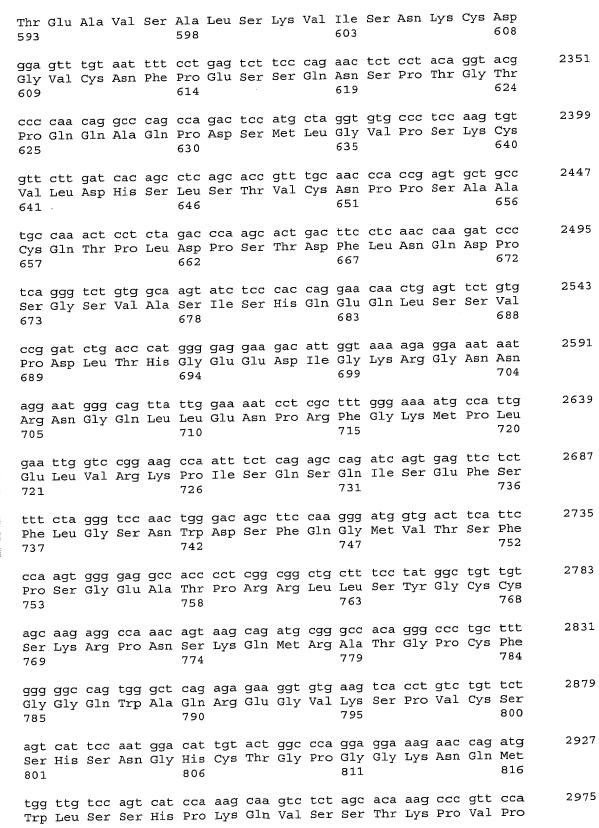


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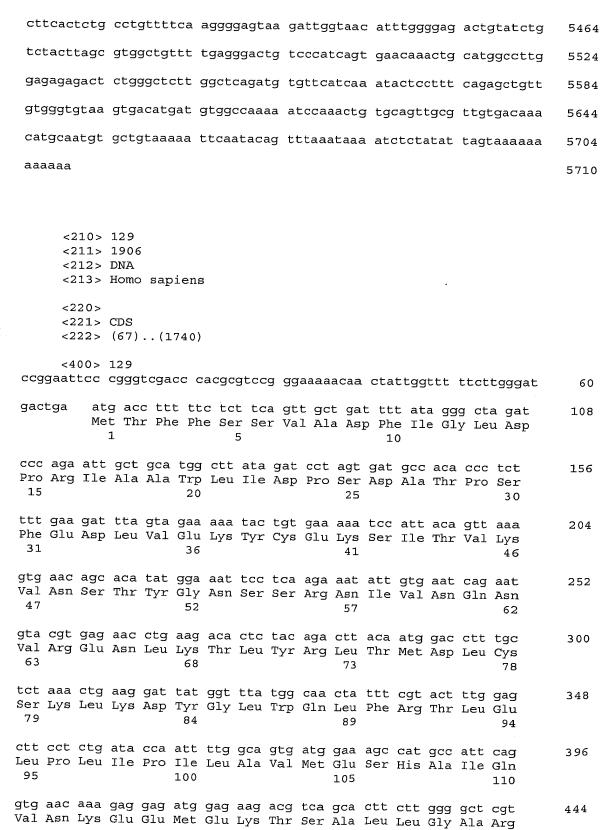
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	tgt Cys															1007
gga Gly 177	atg Met	gcc Ala	aac Asn	atc Ile	cat His 182	gcc Ala	atc Ile	cgg Arg	aac Asn	agc Ser 187	ttt Phe	cag Gln	tac Tyr	ctc Leu	cgg Arg 192	1055
	gtg Val															1103
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gtg Val 225	ctg Leu	gtg Val	gct Ala	aat Asn	aca Thr 230	gta Val	gac Asp	cgg Arg	gaa Glu	ggc Gly 235	cgg Arg	cct Pro	gtg Val	ctg Leu	gta Val 240	1199
cac His 241	tgc Cys	tca Ser	gat Asp	ggc Gly	tgg Trp 246	gac Asp	cgc Arg	aca Thr	ccg Pro	cag Gln 251	atc Ile	gta Val	gcc Ala	ctg Leu	gcc Ala 256	1247
	ata Ile															1295
	gtg Val															1343
tgt Cys 289	ggc	cac His	caa Gln	gag Glu	aat Asn 294	gtg Val	gag Glu	gac Asp	caa Gln	aac Asn 299	gaa Glu	caa Gln	tgc Cys	cct Pro	gtg Val 304	1391
ttc Phe 305	ctc Leu	cag Gln	tgg Trp	ctt Leu	gat Asp 310	tct Ser	gtt Val	cat His	cag Gln	ttg Leu 315	ctt Leu	aag Lys	cag Gln	ttc Phe	ccc Pro 320	1439
tgc Cys 321	atg Met	ttt Phe	gaa Glu	ttt Phe	aat Asn 326	gaa Glu	gca Ala	ttc Phe	ctg Leu	gta Val 331	aaa Lys	ctg Leu	gtg Val	caa Gln	cac His 336	1487
aca Thr 337	tac Tyr	tcc Ser	tgc Cys	ctc Leu	tac Tyr 342	ggc Gly	acc Thr	ttc Phe	ctg Leu	gcc Ala 347	aac Asn	aac Asn	ccc Pro	tgt Cys	gag Glu 352	1535
cga Arg 353	gag Glu	aag Lys	cgc Arg	aac Asn	atc Ile 358	tac Tyr	aag Lys	cgg Arg	acc Thr	tgc Cys 363	tct Ser	gtg Val	tgg Trp	gcg Ala	ctc Leu 368	1583

ctt Leu 369	cga Arg	gct Ala	gly aac	aat Asn	aaa Lys 374	aac Asn	ttt Phe	cat His	aac Asn	ttc Phe 379	ctc Leu	tac Tyr	aca Thr	ccc Pro	agc Ser 384	1631
				ctg Leu												1679
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gaa Glu 417	aac Asn	atg Met	gat Asp	ctt Leu	tac Tyr 422	ctt Leu	tcc Ser	cca Pro	gtg Val	gcc Ala 427	cag Gln	agc Ser	cag Gln	gag Glu	ttc Phe 432	1775
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ctt Leu 449	ctt Leu	tct Ser	gcc Ala	tgt Cys	gac Asp 454	aca Thr	agc Ser	agc Ser	ccc Pro	ctg Leu 459	act Thr	cgt Arg	aca Thr	tcc Ser	agt Ser 464	1871
gac Asp 465	cct Pro	aac Asn	ctg Leu	aat Asn	aac Asn 470	cac His	tgt Cys	cag Gln	gag Glu	gtc Val 475	agg Arg	gta Val	ggc Gly	ctg Leu	gag Glu 480	1919
ccc Pro 481	tgg Trp	cac His	agc Ser	aat Asn	cct Pro 486	gag Glu	gga Gly	tca Ser	gag Glu	aca Thr 491	agc Ser	ttt Phe	gtg Val	gac Asp	tct Ser 496	1967
999 Gly 497	gta Val	gga Gly	gly aaa	cct Pro	cag Gln 502	caa Gln	act Thr	gta Val	gga Gly	gaa Glu 507	gtg Val	ggt Gly	ctt Leu	cct Pro	cct Pro 512	2015
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agt Ser 529	cac His	aaa Lys	agc Ser	tgt Cys	tct Ser 534	cca Pro	agt Ser	tac Tyr	aaa Lys	ctg Leu 539	ctt Leu	aat Asn	acc Thr	gca Ala	gtg Val 544	2111
cct Pro 545	cgg Arg	gaa Glu	atg Met	aag Lys	agc Ser 550	aac Asn	acc Thr	tct Ser	gat Asp	cct Pro 555	gag Glu	atc Ile	aaa Lys	gtc Val	cta Leu 560	2159
gaa Glu 561	gag Glu	act Thr	aag Lys	gga Gly	cca Pro 566	gct Ala	cca Pro	gac Asp	cct Pro	tct Ser 571	gcc Ala	cag Gln	gat Asp	gag Glu	ctg Leu 576	2207
ggt Gly 577	agg Arg	act Thr	tta Leu	gat Asp	ggc Gly 582	ata Ile	gjå aaa	gag Glu	cca Pro	cct Pro 587	gaa Glu	cat His	tgt Cys	cct Pro	gaa Glu 592	2255
aca	gaa	gct	gtc	agt	gca	ctc	tcc	aag	gtc	att	tct	aac	aag	tgt	gat	2303



81	L <b>7</b>				822	2				82	7				832	
ct Le 83	u AS	c tga n Cya	c cci s Pro	t tc Se:	t cca r Pro 838	o Va.	g cct l Pro	c cc	t cto	g ta u Ty: 84:	r Leı	g gat ı Asp	gat Asp	z gat o As <u>r</u>	gga Gly 848	3023
ct Le 84	u PI	c ttt D Phe	cco Pro	c acç Thi	g gat Asp 854	va.	g atc l Ile	cag Glr	g cat n His	t agg s Arg 859	g Leu	ı cgç ı Arg	caa Glr	a ato	gaa Glu 864	3071
gc Al 86	a Gry	g tac 7 Tyr	aaa Lys	a caa Glr	gag Glu 870	ιVal	g gag . Glu	cag Gln	g cta 1 Leu	a cgt a Arg 875	y Arg	cag Gln	gtg Val	g cgt Arg	gag Glu 880	3119
cti Lei 883	t cag u Gln 1	g atg Met	agg Arg	r ctg Leu	gac Asp 886	Ile	cgt Arg	cac His	tgc Cys	tgt Cys 891	Ala	cct Pro	cca Pro	gca Ala	gag Glu 896	3167
ccc Pro 897	c ccc Pro 7	atg Met	gac Asp	tat Tyr	gag Glu 902	gat Asp	gat Asp	ttt Phe	aca Thr	tgt Cys 907	Leu	aag Lys	gag Glu	tca Ser	gat Asp 912	3215
990 Gl <sub>y</sub> 913	c agt / Ser	gat Asp	act Thr	gag Glu	gat Asp 918	ttt Phe	ggc Gly	tct Ser	gat Asp	cac His 923	agt Ser	gaa Glu	gac Asp	tgc Cys	ctt Leu 928	3263
tca Ser 929	gaa Glu	gca Ala	agc Ser	tgg Trp	gaa Glu 934	cct Pro	gtt Val	gat Asp	aag Lys	aaa Lys 939	gag Glu	act Thr	gag Glu	gtg Val	act Thr 944	3311
cgc Arg 945	tgg Trp	gtt Val	cca Pro	gac Asp	cat His 950	atg Met	gca Ala	tca Ser	cac His	tgc Cys 955	tat Tyr	aac Asn	tgt Cys	gac Asp	tgt Cys 960	3359
gaa Glu 961	ttc Phe	tgg Trp	ttg Leu	gcc Ala	aaa Lys 966	cga Arg	aga Arg	cac His	cat His	tgc Cys 971	aga Arg	aat Asn	tgt Cys	gl <sup>à</sup> aaa	aat Asn 976	3407
gta Val 977	ttt Phe	tgt Cys	gct Ala	gga Gly	tgc Cys 982	tgc Cys	cac His	ctg Leu	aag Lys	ctg Leu 987	ccc Pro	att Ile	cct Pro	Asp	cag Gln 992	3455
caa Gln 993	ctc Leu	tat Tyr	gac Asp	cca Pro	gtt Val 998	ctc Leu	gtc Val	tgt Cys	Asn	tca Ser 003	tgt Cys	tac Tyr	gaa Glu	His	att Ile 008	3503
caa Gln 1009	gtc Val	tct Ser	cgt Arg .	Ата	agg ( Arg (	gaa Glu	ctc a Leu M	atg Met	Ser	caa Gln 019	cag ( Gln )	ctg a	aag Lys	Lys :	ccc Pro 024	3551
att Ile 1025	gct Ala	aca ( Thr <i>i</i>	gct Ala :	ser	agt ( Ser 030	tga : *	at go	ccgg	ggag	a aa	cctgi	cca	atti	ttago	cag	3604
gttt	gaag	gg aç	ggato	ette	t tca	agtt	gtag	tttg	ggaag	ggt ·	tcctt	ggtg	gt gg	gctca	atgaa	3664
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111	L				116	5				12:	1.				126	
cto Leu 127	ı Lys	g gaa g Glu	a ttg 1 Leu	gag Glu	g caa Glr 132	Glu	gct Ala	cat His	t ttt S Phe	gtt Val	l Ala	a gga a Gl <sub>l</sub>	ı gaa Glu	a cgg ı Arg	g ttt g Phe 142	492
ctt Leu 143	ı Ile	acc Thr	g ago Ser	aat Asn	aac Asn 148	Gln	ctt Leu	cga Arg	ı gaç g Glü	g ato 11le 153	Leu	ttt Phe	: gly	aag Lys	tta Leu 158	540
aag Lys 159	Leu	g cac His	ctg Leu	ctg Leu	agt Ser 164	Gln	agg Arg	aac Asn	: agt . Ser	cto Lev 169	Pro	aga Arg	acg Thr	. GJ <sup>A</sup> 1 aaz	ttg Leu 174	588
cag Gln 175	Lys	tac Tyr	ccg Pro	tct Ser	aca Thr 180	Val	tca Ser	. gaa Glu	gca Ala	. tta . Leu 185	ı Asn	gct Ala	ctg Leu	cga Arg	gac Asp 190	636
ctt Leu 191	His	cca Pro	tta Leu	ccc Pro	aag Lys 196	ata Ile	att Ile	ttg Leu	gaa Glu	tac Tyr 201	Arg	cag Gln	gtt Val	cac His	aag Lys 206	684
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gta Val 319	ttt Phe	tct Ser	act Thr	ctg Leu	act Thr 324	tca Ser	cag Gln	tgg Trp	aag Lys	gat Asp 329	gtg Val	ccc Pro	gtg Val	gaa Glu	cag Gln 334	1068
gtg Val 335	aca Thr	cac His	gca Ala	Asp	aga Arg 340	gag Glu	caa Gln	acc Thr	aag Lys	aag Lys 345	gtg Val	gtg Val	tac Tyr	gcg Ala	gtg Val 350	1116

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						tcc Ser										1404
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						gct Ala										1548
						gtg Val										1596
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cgc Arg 527	act Thr	gag Glu	tct Ser	ccc Pro	agc Ser 532	aac Asn	agc Ser	ctg Leu	gct Ala	gcc Ala 537	cct Pro	Gly 999	tcc Ser	cct Pro	gcc Ala 542	1692
agc Ser 543	acc Thr	cag Gln	ccc Pro	cca Pro	ccc Pro 548	ctg Leu	cat His	ttt Phe	Ser	cct Pro 553	tca Ser	ttt Phe	tgt Cys	ctg Leu	tag * 558	1740
cccc	aggc	aa c	agtg	ggag	g ag	agaa	ctgg	ttt	ccag	cag	tcca	ttgt	gt g	gcct	tcccc	1800
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1906

121

Ser Arg Arg Gly Ala Lys Ile Ser Glu Thr Ser Ser Val Glu Ser Val

116

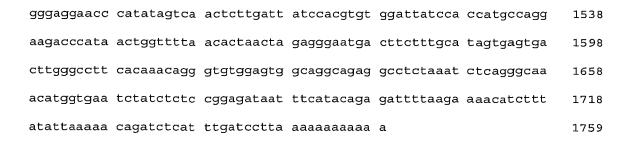
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tcc tgt aca Ser Cys Thi 143	a gct ggg r Ala Gly	cca aac Pro Asn 148	cca acc Pro Thr	cta Leu	999 Gly 153	agg Arg	cca Pro	ctg Leu	tct Ser	cct Pro 158	782
aag ccg tca Lys Pro Sei 159	a tcc ccg Ser Pro	gga tca Gly Ser 164	gtt ttg Val Leu	gct Ala	cgt Arg 169	cca Pro	tca Ser	gtg Val	atc Ile	tgc Cys 174	830
cat acc act His Thr Thr 175	gtg act Val Thr	gca ttg Ala Leu 180	aaa gat Lys Asp	gtc Val	cct Pro 185	ttc Phe	tct Ser	ctc Leu	tgc Cys	cag Gln 190	878
tcg gtc ggt Ser Val Gly 191	gtg gga Val Gly	caa aac Gln Asn 196	aca gat Thr Asp	Ile	cag Gln 201	cag Gln	ata Ile	gcg Ala	gcc Ala	aaa Lys 206	926
aac ttc aca Asn Phe Thr 207	gac acc Asp Thr	tct ctc Ser Leu 212	atg tac Met Tyr	Pro	gag Glu 217	gac Asp	act Thr	tgt Cys	aaa Lys	tct Ser 222	974
gga cca agt Gly Pro Ser 223	acg aat Thr Asn	aca cag Thr Gln 228	agt ggt Ser Gly	Leu	ttc Phe 233	aac Asn	act Thr	cct Pro	ccc Pro	cct Pro 238	1022
act cca ccg Thr Pro Pro 239	gac ctc Asp Leu	aac cag Asn Gln 244	gac ttc Asp Phe	Ser	gga Gly 249	ttt Phe	cag Gln	ctt Leu	cta Leu	gtg Val 254	1070
gat gtt gca Asp Val Ala 255	ctc aaa Leu Lys	cgg gct Arg Ala 260	gca gag Ala Glu	Met 0	gag ( Glu 1 265	ctt Leu (	cag Gln	gca Ala	aaa Lys	ctt Leu 270	1118
aca gct taa Thr Ala * 271	cccattt	tcaagcaa	aa cagtt	ctcaç	g aaa	atgt	catg	att	gccg	aaa	1174
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ttattcataa 1											1414
ttttttgtta 1											1474
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119

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											ggc Gly					846
											aag Lys					894
											tcc Ser					942
			_				-	_			agc Ser	_	_	_		990
_	-	_		_	_	_				_	atc Ile		_			1038
											atg Met					1086
	_		-								atc Ile		-		_	1134
					_		_	_		_	aag Lys	_	_			1182
											aag Lys					1230
				_	-				_	_	agt Ser				_	1278
											ctg Leu					1326
											tgg Trp					1374
											gac Asp					1422
cgc Arg 343	tga *	agag	ıtctc	gc t	gtgg	jaata	t gt	.cagg	gato	: cct	ggtg	ıgaa	9999	jaggg	ıga	1478



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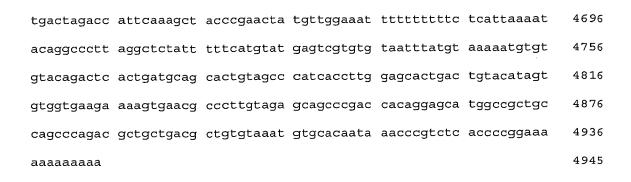
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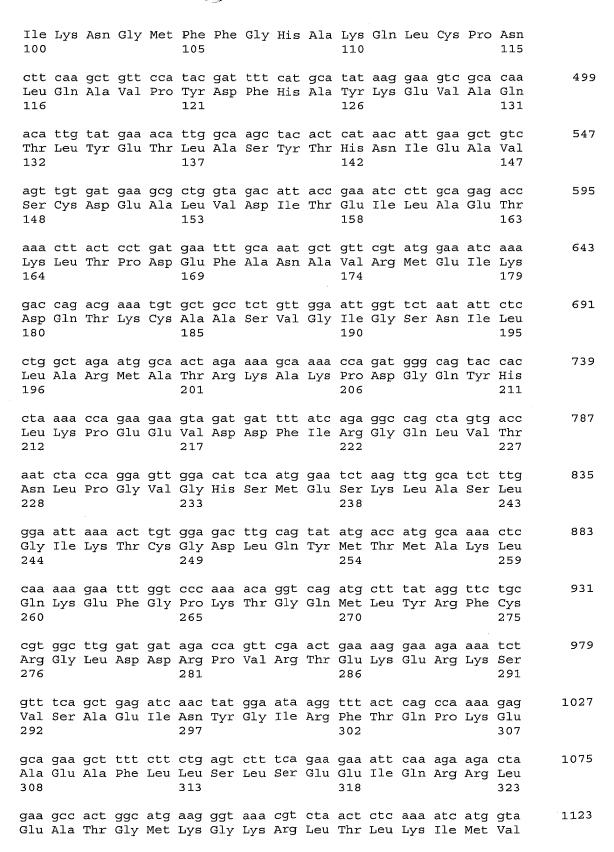
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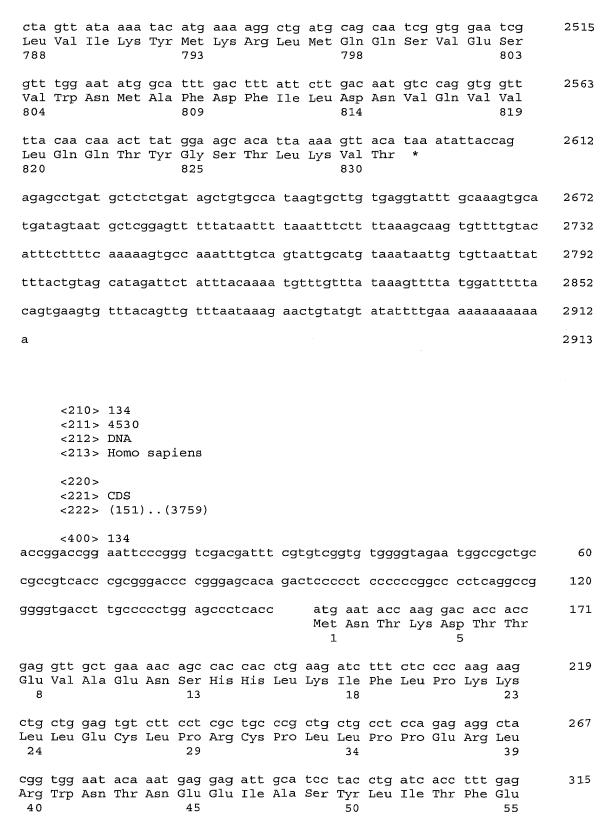
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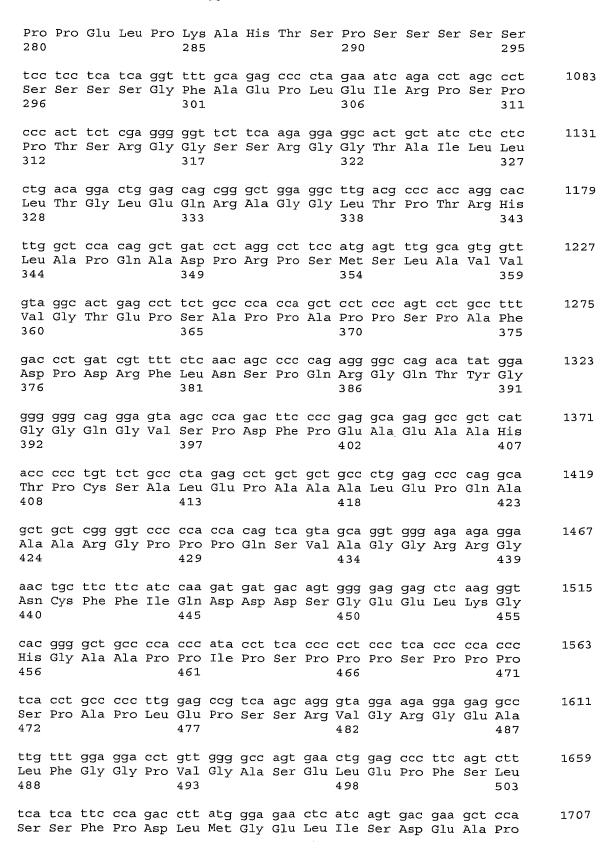


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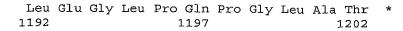
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Half Harm Straff					Lys					Val			gct Ala		Ile		3387
The grace county agrees and the county agrees done					Lys					Thr			gca Ala		Lys		3435
Harman Harman	gca Ala 1096	ctc Leu	tat Tyr	aag Lys	Lys	atg Met 101	acc Thr	cag Gln	gcg Ala	Ala	atc Ile 106	ctg Leu	atc Ile	cag Gln	Ser	aag Lys 1111	3483
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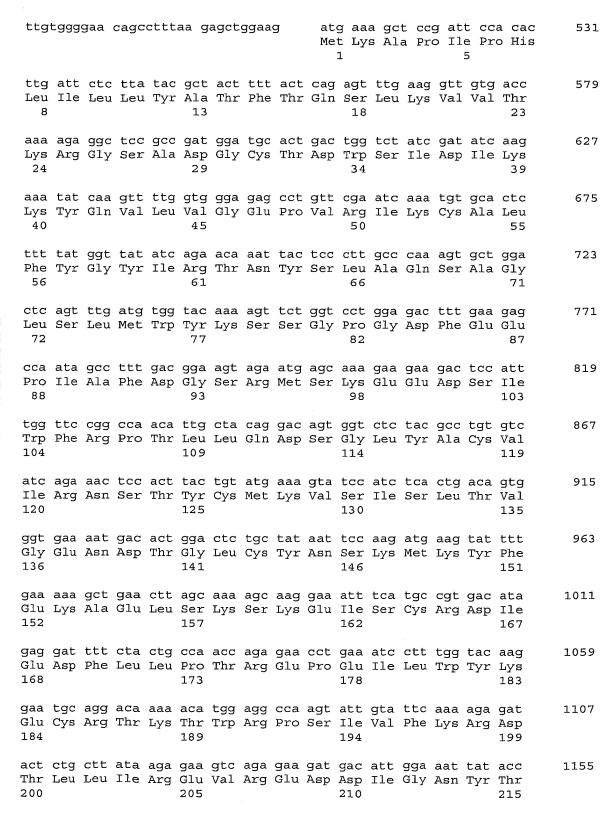
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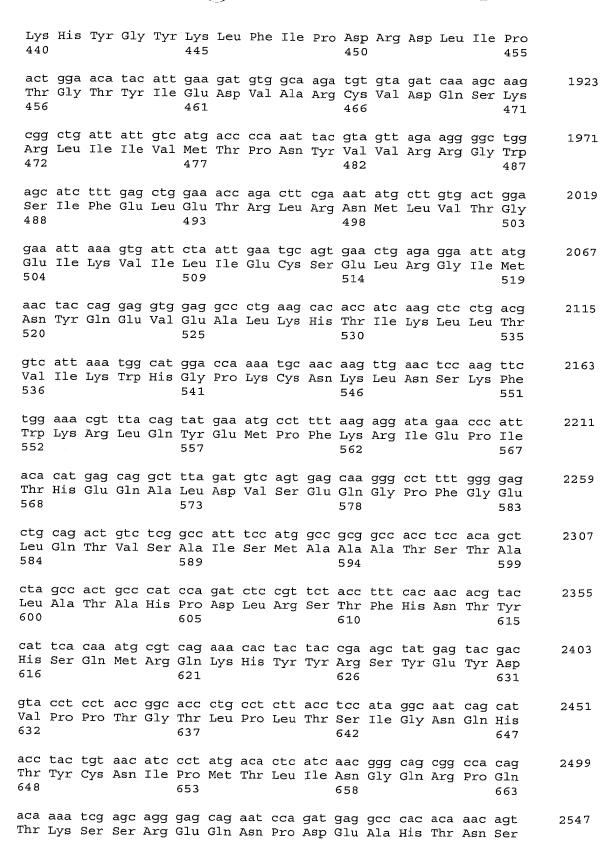
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_	_							_		_	_	act Thr		_		1203
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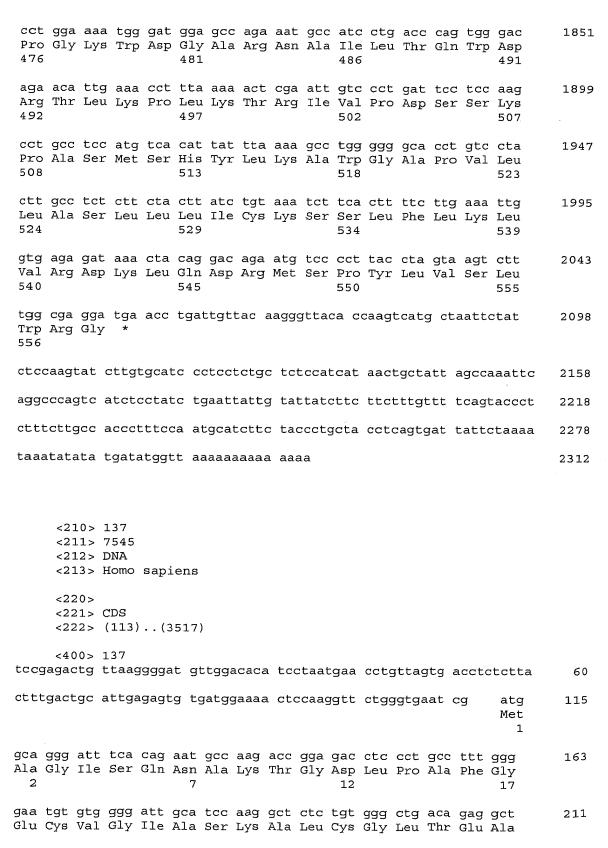
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459

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12					17					22					27	
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gcc Ala												979
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atc Ile			_			_	 		_	_	 	1075
cat His												1123
 gca Ala	_		 _		_		_					1171
gtg Val												1219
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act Thr												1459
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aag Lys												1555

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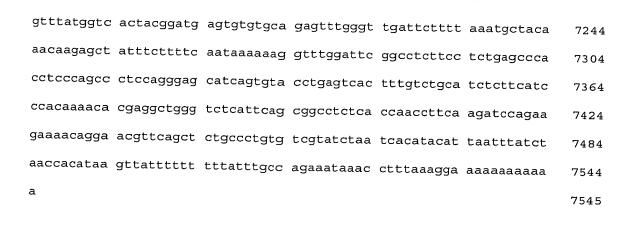
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	acc Thr															2947

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M. Hall M. Marie					Asn					Ala				gct Ala	Phe		3331
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Pro 23	FIO	ggt Gly	ttc Phe	agt Ser	gta Val 28	Ala	cag Gln	aag Lys	cca Pro	ttt Phe 33	gga Gly	gcc Ala	acg Thr	tat Tyr	gta Val 38	149
tgg Trp 39	DCI	agc Ser	atc Ile	ata Ile	aac Asn 44	act Thr	ctt Leu	caa Gln	aca Thr	caa Gln 49	gtg Val	gaa Glu	gtg Val	aaa Lys	aaa Lys 54	197
cga Arg 55	agg Arg	cac His	cgt Arg	tta Leu	aaa Lys 60	cga Arg	cat His	aat Asn	gac Asp	tgc Cys 65	ttt Phe	gtt Val	ggt Gly	tca Ser	gaa Glu 70	245
gct Ala 71	gtg Val	gat Asp	gtc Val	att Ile	ttt Phe 76	tct Ser	cac His	cta Leu	att Ile	cag Gln 81	aat Asn	aag Lys	tat Tyr	ttt Phe	ggt Gly 86	293
gat Asp 87	gta Val	gat Asp	att Ile	cct Pro	cga Arg 92	gcc Ala	aaa Lys	gtg Val	gtg Val	aga Arg 97	gtg Val	tgt Cys	caa Gln	gcg Ala	ctt Leu 102	341
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	Met 103	t As	р Ту	r Ly	⁄s Va	al Ph 10	e Gl 8	u Al	a Va	l Pr	o Th		ys Va	al Pl	ne G	ly Lys 118	
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Total Republication	aac Asn 247	tat Tyr	ctg Leu	gat Asp	cga Arg	999 Gly 252	att Ile	ctc Leu	aag Lys	gct Ala	tat Tyr 257	agt Ser	gac Asp	tct Ser	caç Glr	ggaa Glu 262	821
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And And Markette	att Ile 455	gat Asp	caa Gln	cgt Arg	gac Asp	tat Tyr 460	tcc Ser	aac Asn	aat Asn	aca Thr	gag Glu 465	aag Lys	aca Thr	acc Thr	aaa Lys	gat Asp 470	1445
	gag Glu 471	ctg Leu	ttg Leu	aat Asn	tta Leu	cta Leu 476	aaa Lys	act Thr	ctt Leu	gat Asp	gag Glu 481	gat Asp	tca Ser	aaa Lys	Leu	tct Ser 486	1493
# <b>1</b>	gcc Ala 487	aaa Lys	gag Glu	aag Lys	гàг	aaa Lys 492	ttg Leu :	cta Leu	ggt Gly	Gln	ttc Phe 497	tat Tyr	aag Lys	tgt Cys	His	cca Pro 502	1541
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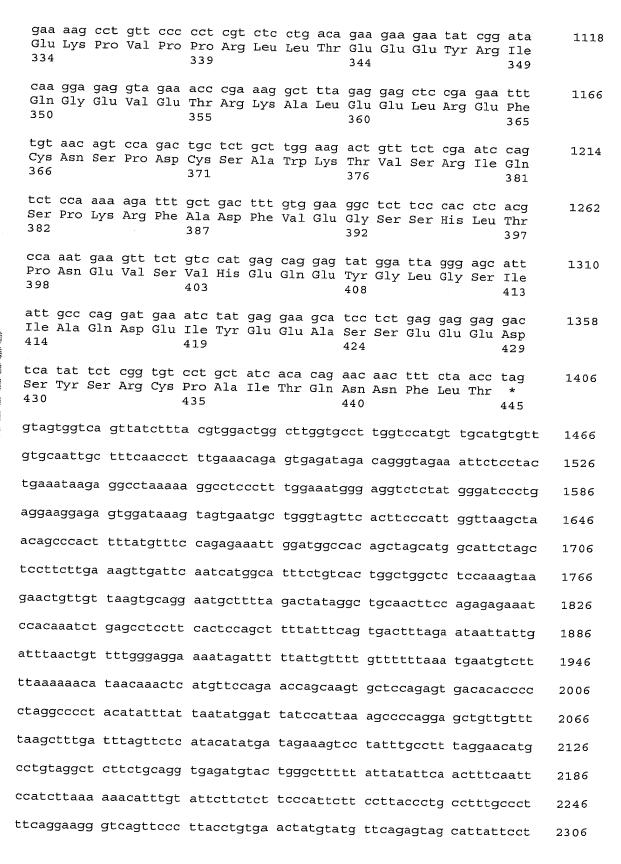
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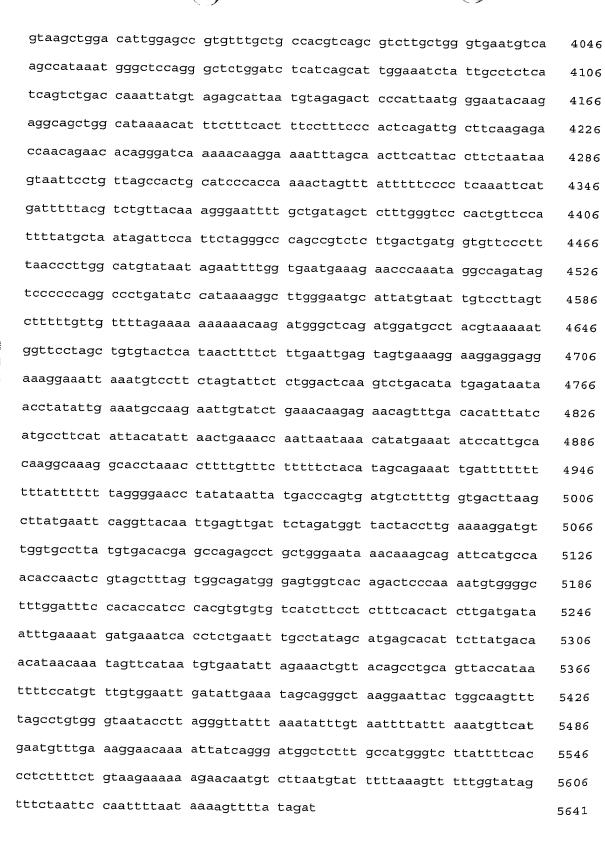
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Asp Val Asn Val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg 46 51 56 61	
Asp val Ash val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg	302
Asp val Ash val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg  46  51  56  61  gcc agc caa caa ttc tgt tac aca aat gtg ctt atc cca caa tgg cat  Ala Ser Gln Gln Phe Cys Tyr Thr Asn Val Leu Ile Pro Gln Trp His	302 350

	tt Ph 11	. 56	jt a er I	tc t le T	gg rp	aac Asn	tt Ph 11	e Ph	t to	cc er	tco Sei	tt:	e I	ta Leu 20	Ьу	a ga s Gl	ıg aa .u Ly	aa /s	ttg Lev	g aat 1 Asn 125		446
	ga As 12	ъ т11	c ta r Ty	at g yr V	tt al .	aac Asn	gt Va 13	T GT	t ct y Le	ca eu	tac Tyr	ag Se	r T	ica hr 36	aa: Ly:	a ac s Th	c to	jc ( /s ]	cto Leu	aaa Lys 141		494
	gt Va 14:	T Q1	g at u Il	et a Le II	ta q le (	gag 3lu	аад Lys 147	s As	c ac p Th	cc	aag Lys	ta Ty	r S	gt er 52	gto Va]	c at L Il	t gt e Va	g a	atc [le	cgg Arg 157		542
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Him than East Sure	ata Ile 206	TIEU	tc Se	t aa r Ly	g t s P	ne	atg Met 211	cct Pro	aag Ly:	g a	aaa Lys	agt Ser	21	0	att Ile	tac Tyr	gto Val	са l I	tc le	ctg Leu 221		734
Mines Santa	gtg Val 222	gga Gly	. G1 <sup>2</sup>	c tg / Tr	g t p S	er	ttt Phe 227	tct Ser	cto	y t	ac 'yr	ctc Leu	at I1 23	е (	caa Gln	cta Leu	gtt Val	ti Pl	ne	aaa Lys 237		782
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	gcc Ala 302	ctt Leu	gcc Ala	att Ile	at Il	е т	tc le 07	att Ile	gct Ala	ct Le	et t	'ys	act Thr 312	L	ag ys 1	aac Asn	ctg Leu	ga Gl	u E	cac His Bl7	:	1022
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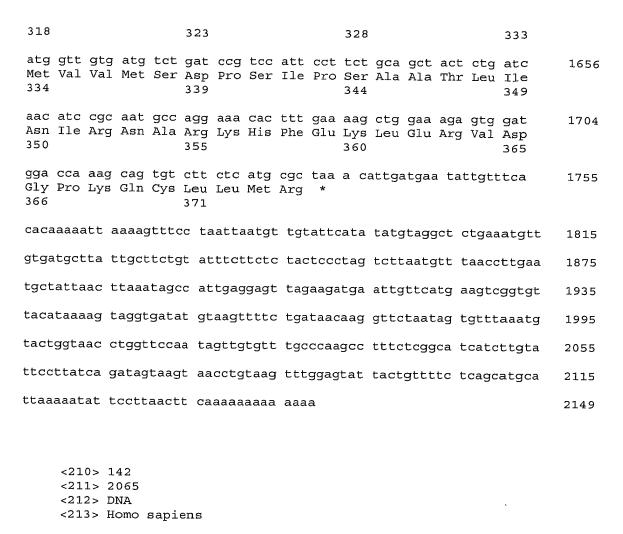
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Let 94	ı Vai	l As	p Se	r Va	l Gl 9		n Th	r Ly	s Th	r Phe		p Va	l Glı	u Hi	s Ser 109	
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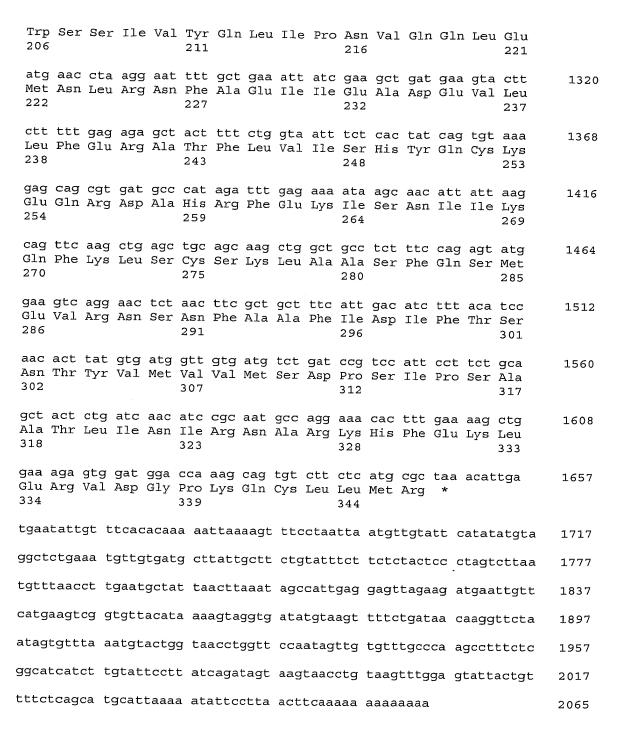
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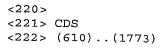


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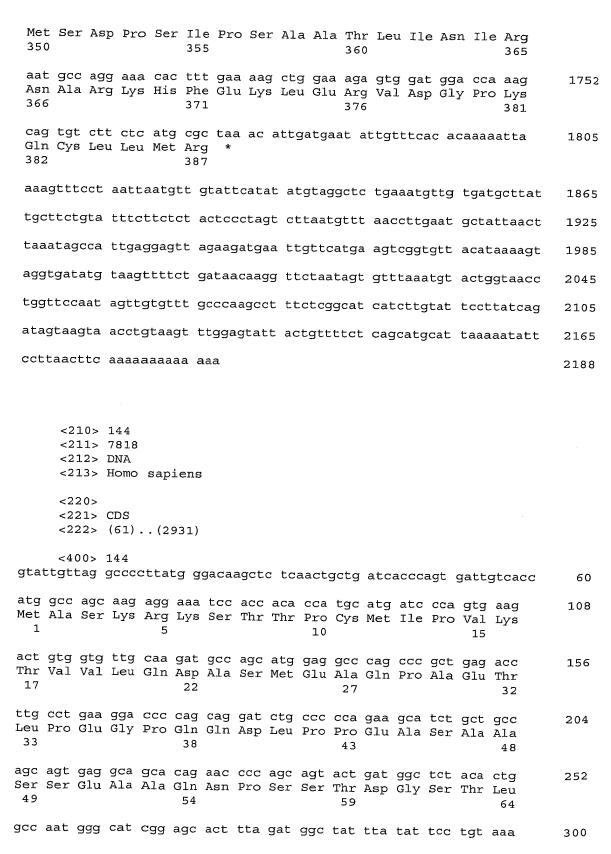


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acc Thr 142	Phe	at <u>c</u> Met	g gaa Glu	a aat u Asr	tai 1 Tyi 147	r Phe	c act e Thi	ago Ser	caa Glr	a cgg n Arg 152	g Asp	c aa o Ası	c ato	c tte e Phe	c cga e Arg 157	1080
aat Asn 158	. vaı	gag . Glu	gtt Val	ctg Leu	att I Ile 163	∋ Туз	gto Val	ttt Phe	gat Asp	gtg Val	l Gli	g ago ı Sei	c cgo	c gaa g Gli	a ctg 1 Leu 173	1128
gaa Glu 174	Lys	gac Asp	ato Met	g cac His	tat Tyr 179	туг	c caa Gln	ı tca Ser	tgo Cys	cto Leu 184	ı Glu	g gco ı Ala	att a Ile	cto Lei	g cag ı Gln 189	1176
aat Asn 190	tct Ser	cca Pro	gat Asp	gcc Ala	aaa Lys 195	Ile	ttt: Phe	tgc Cys	ttg Leu	gta Val 200	. His	aaa Lys	atg Met	gat : Asp	ctg Leu 205	1224
gta Val 206	cag Gln	gag Glu	gat Asp	caa Gln	cgg Arg 211	Asp	ctg Leu	att Ile	ttt Phe	aaa Lys 216	Glu	cga Arg	gaa Glu	gaa Glu	gat Asp 221	1272
ttg Leu 222	agg Arg	cgt Arg	ttg Leu	tct Ser	cgc Arg 227	Pro	ttg Leu	gaa Glu	tgt Cys	tct Ser 232	tgt Cys	ttc Phe	cga Arg	aca Thr	tct Ser 237	1320
atc Ile 238	tgg Trp	gat Asp	gaa Glu	acc Thr	ctc Leu 243	tat Tyr	aag Lys	gct Ala	tgg Trp	tcc Ser 248	agc Ser	ata Ile	gtt Val	tat Tyr	cag Gln 253	1368
ctg Leu 254	att Ile	ccc Pro	aat Asn	gtt Val	cag Gln 259	cag Gln	ctg Leu	gaa Glu	atg Met	aac Asn 264	cta Leu	agg Arg	aat Asn	ttt Phe	gct Ala 269	1416
gaa Glu 270	att Ile	atc Ile	gaa Glu	gct Ala	gat Asp 275	gaa Glu	gta Val	ctt Leu	ctt Leu	ttt Phe 280	gag Glu	aga Arg	gct Ala	act Thr	ttt Phe 285	1464
ctg Leu 286	gta Val	att Ile	tct Ser	cac His	tat Tyr 291	cag Gln	tgt Cys	aaa Lys	gag Glu	cag Gln 296	cgt Arg	gat Asp	gcc Ala	cat His	aga Arg 301	1512
ttt Phe 302	gag Glu	aaa Lys	ata Ile	agc Ser	aac Asn 307	att Ile	att Ile	aag Lys	cag Gln	ttc Phe 312	aag Lys	ctg Leu	agc Ser	tgc Cys	agc Ser 317	1560
aag Lys : 318	ctg Leu	gct Ala	gcc Ala	tct Ser	ttc Phe 323	cag Gln	agt Ser	atg Met	gaa Glu	gtc Val 328	agg Arg	aac Asn	tct Ser	aac Asn	ttc Phe 333	1608
gct o Ala 2 334	gct Ala	ttc Phe	att Ile	Asp	atc Ile 339	ttt Phe	aca Thr	tcc Ser	Asn	act Thr 344	tat Tyr	gtg Val	atg Met	gtt Val	gtg Val 349	1656
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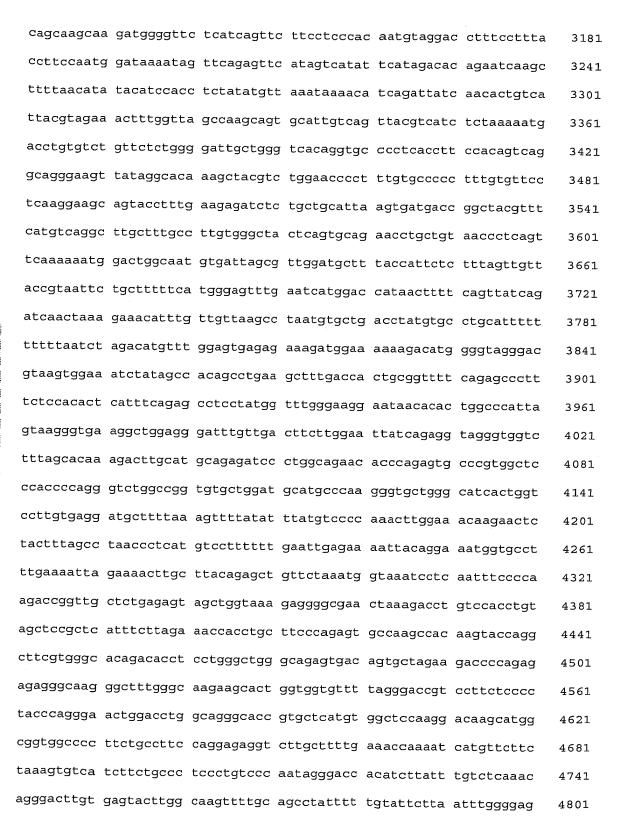


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tac Tyr 81	Cys	c ga	t tto p Pho	c aga e Arg	a tco y Sei 80	r His	gac S Asp	c ato Met	g aco	C Caa Glr 91	ı Phe	t gtg e Val	g gga	a cat	t atg Met 96	348
aac Asn 97	. Ser	a gag	g cad u His	c aca s Thr	gad Asp 102	) Phe	aat Asn	aaa Lys	a gad S Asp	c cca Pro 107	Thi	ttt Phe	gta Val	a tgo L Cys	agt Ser 112	396
999 Gly 113	CAE	s Sei	t ttt r Phe	ctg Leu	gca Ala 118	Lys	acc Thr	cct Pro	gag Glu	999 Gly 123	Let	tcc Ser	tto Leu	g cac His	aat Asn 128	444
gcc Ala 129	Thr	tgt Cys	cac His	tcc Ser	ggg Gly 134	Glu	gcc Ala	ago Ser	ttt Phe	gtg Val 139	Trp	aac Asn	gtg Val	gco Ala	aag Lys 144	492
cca Pro 145	gac Asp	aat Asr	cat His	gtg Val	gtt Val 150	Val	gag Glu	cag Gln	agc Ser	atc Ile 155	cct Pro	gag Glu	agc Ser	acc Thr	agc Ser 160	540
act Thr 161	cct Pro	gac Asp	cta Leu	gcg Ala	ggt Gly 166	Glu	ccc Pro	agt Ser	gct Ala	gaa Glu 171	gly aaa	gct Ala	gat Asp	gga Gly	cag Gln 176	588
gca Ala 177	gaa Glu	atc Ile	atc Ile	att Ile	acc Thr 182	aaa Lys	act Thr	cca Pro	atc Ile	atg Met 187	aag Lys	ata Ile	atg Met	aaa Lys	ggc Gly 192	636
aaa Lys 193	gct Ala	gaa Glu	gcc Ala	aaa Lys	aaa Lys 198	att Ile	cat His	aca Thr	ctc Leu	aag Lys 203	gag Glu	aat Asn	gtc Val	cct Pro	agc Ser 208	684
cag Gln 209	cct Pro	gtg Val	ggt Gly	gag Glu	gcc Ala 214	tta Leu	cca Pro	aag Lys	ctg Leu	tcg Ser 219	act Thr	gga Gly	gaa Glu	atg Met	gag Glu 224	732
gtg Val 225	aga Arg	gag Glu	Gly 999	gac Asp	cat His 230	tcc Ser	ttc Phe	atc Ile	aat Asn	999 Gly 235	gca Ala	gtt Val	cca Pro	gtc Val	agc Ser 240	780
cag Gln 241	gca Ala	tct Ser	gcc Ala	agc Ser	tct Ser 246	gca Ala	aaa Lys	aac Asn	ccc Pro	cat His 251	gcc Ala	gcc Ala	aac Asn	gly aaa	ccc Pro 256	828
ctg Leu 257	ata Ile	gga Gly	aca Thr	gtg Val	cca Pro 262	gtt Val	ttg Leu	cca Pro	gct Ala	ggc Gly 267	ata Ile	gca Ala	cag Gln	ttc Phe	ctc Leu 272	876
tcc Ser 273	ctc Leu	cag Gln	cag Gln	cag Gln	ccc Pro 278	cca Pro	gtg Val	cat His	gcc Ala	caa Gln 283	cac His	cat His	gtc Val	cac His	cag Gln 288	924
cca Pro	ctg Leu	ccc Pro	acg Thr	gcc Ala	aag Lys	gcc Ala	ctt Leu	ccc Pro	aaa Lys	gtg Val	atg Met	atc Ile	ccc Pro	ctg Leu	agc Ser	972

289					294	4				29	9				304	
agc Ser 305	att Ile	cca Pro	a acg	g tao Tyi	agt Sei 310	: Ala	a gco a Ala	c at <u>c</u> a Met	g gad E Asj	c tct p Sei 319	r Ası	c ago n Sei	c tto	cto Lei	g aag 1 Lys 320	1020
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ttg Leu 337	act Thr	gtg Val	gtg Val	aco Thr	aag Lys 342	Tyr	cca Pro	ga <i>a</i> Glu	ı gaa ı Glı	a cag ı Glr 347	ı Leı	aag Lys	g ato	tgg Trp	ttc Phe 352	1116
aca Thr 353	gcc Ala	caa Gln	agg Arg	cto Leu	aag Lys 358	Gln	Gly Gly	g ato Tle	ago Ser	tgg Trp 363	Ser	c cct	gag Glu	gag Glu	att Ile 368	1164
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tcc Ser 449	gtc Val	ccc Pro	aag Lys	cag Gln	cca Pro 454	ggt Gly	gtg Val	gca Ala	ccc Pro	att Ile 459	aac Asn	act Thr	gtg Val	tgt Cys	tca Ser 464	1452
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acg of Thr A	gcc Ala	tgc Cys	ccc Pro	agc Ser	ata Ile 486	acc Thr	tcc Ser	caa Gln	gcc Ala	ttc Phe 491	ctt Leu	gat Asp	gct Ala	agc Ser	atc Ile 496	1548
tac a Tyr I 497	aaa Lys	aat Asn	aag Lys	aaa Lys	tct Ser 502	cat His	gaa Glu	cag Gln	ctg Leu	tca Ser 507	gct Ala	ctg Leu	aaa Lys	gl <sup>y</sup> aaa	agc Ser 512	1596
ttc t Phe C 513	egt Cys	cgg Arg	aac Asn	cag Gln	ttc Phe 518	cca Pro	gl <sup>y</sup> aaa	cag Gln	agc Ser	gaa Glu 523	gtt Val	gaa Glu	cat His	ctc Leu	aca Thr 528	1644

aaa Lys 529	Va.	g acq l Thi	c Gl <sup>2</sup> A aa	c ct / Le	c agt u Sei 534	Thr	aga Ar	a gag g Glu	g gte 1 Val	g cgg l Arg 539	J Ly:	a tgg s Trp	g tto Phe	c agt e Sei	gat Asp 544	1692
cgt Arg 545	Arg	a tad J Tyr	Cac His	tge Cy	c cgg s Arg 550	) Asn	tto Lei	g aag	ggg Gl	c tco / Sei 555	: Arg	a gcg g Ala	g ato Met	g ata : Ile	cct Pro 560	1740
gga Gly 561	Asp	cac His	: agt Ser	tco Sei	c ato r Ile 566	Ile	att Ile	gac Asp	tct Ser	gtg Val	. Pro	a gag o Glu	gtg Val	tcc Ser	ttc Phe 576	1788
tcc Ser 577	Pro	tcg Ser	tcc Ser	aag Lys	g gtc Val 582	cct Pro	gag Glu	gta Val	acc Thr	tgc Cys 587	Ile	ccg Pro	aca Thr	aca Thr	gcc Ala 592	1836
Thr 593	Leu	Ala	Thr	His	cct Pro 598	Ser	Ala	Lys	Arg	Gln 603	. Ser	Trp	His	Gln	Thr 608	1884
Pro 609	Asp	Phe	Thr	Pro	acc Thr 614	Lys	Tyr	Lys	Glu	Arg 619	Ala	Pro	Glu	Gln	Leu 624	1932
Arg 625	Ala	Leu	Glu	Ser	agt Ser 630	Phe	Ala	Gln	Asn	Pro 635	Leu	Pro	Leu	Asp	Glu 640	1980
Glu 641	Leu	Asp	Arg	Leu	aga Arg 646	Ser	Glu	Thr	Lys	Met 651	Thr	Arg	Arg	Glu	Ile 656	2028
Asp 657	ser	Trp	Phe	Ser	gag Glu 662	Arg	Arg	Lys	Lys	Val 667	Asn	Ala	Glu	Glu	Thr 672	2076
ьув 673	ьуs	Ala	Glu	GLu	aat Asn 678	Ala	Ser	Gln	Glu	Glu 683	Glu	Glu	Ala	Ala	Glu 688	2124
Asp 689	GLu	Gly	Gly	Glu	gag Glu 694	Asp	Leu	Ala	Ser	Glu 699	Leu	Arg	Val	Ser	Gly 704	2172
gaa Glu 705	Asn	GIY	Ser	Leu	Glu 710	Met	Pro	Ser	Ser	His 715	Ile	Leu	Ala	Glu	Arg 720	2220
aaa Lys 721	val	ser	Pro	Ile	Lys 726	Ile	Asn	Leu	Lys	Asn 731	Leu	Arg	Val	Thr	Glu 736	2268
gcc a Ala a 737	aat Asn	ggc Gly	agg Arg	aac Asn	gag Glu 742	att (	cca Pro	Gly :	ctg Leu	ggt Gly 747	gcc Ala	tgt Cys	gac Asp	Pro	gag Glu 752	2316

gat gat gag tca aac aaa ctg gca gag cag ctc cca ggc aaa gtg agc Asp Asp Glu Ser Asn Lys Leu Ala Glu Gln Leu Pro Gly Lys Val Ser 753 768	2364
tgc aaa aag act gcc cag cag cgg cac ttg ctg cgg cag ctc ttt gtc Cys Lys Lys Thr Ala Gln Gln Arg His Leu Leu Arg Gln Leu Phe Val 769 774 779 784	2412
cag aca cag tgg cca agc aac cag gac tat gac tcc atc atg gcc cag Gln Thr Gln Trp Pro Ser Asn Gln Asp Tyr Asp Ser Ile Met Ala Gln 785 790 795 800	2460
acg ggt ctg cca cgg cca gag gtg gtg cgc tgg ttt gga gat agc agg Thr Gly Leu Pro Arg Pro Glu Val Val Arg Trp Phe Gly Asp Ser Arg 801 806 811 816	2508
tac gca ctg aag aac ggc caa ctc aaa tgg tac gaa gac tat aag cga Tyr Ala Leu Lys Asn Gly Gln Leu Lys Trp Tyr Glu Asp Tyr Lys Arg 817 822 827 832	2556
ggc aac ttc cca cca ggg cta ctg gtc att gcc cct ggc aac cgg gag Gly Asn Phe Pro Pro Gly Leu Leu Val Ile Ala Pro Gly Asn Arg Glu 833 838 848	2604
ctc ctg cag gac tat tac atg aca cac aag atg ctg tat gaa gag gac Leu Leu Gln Asp Tyr Tyr Met Thr His Lys Met Leu Tyr Glu Glu Asp 849 854 859 864	2652
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aca ggc agt gag gac cag ggc cct ggt act ggt gag ctc aca gca gtt Thr Gly Ser Glu Asp Gln Gly Pro Gly Thr Gly Glu Leu Thr Ala Val 897 902 907 912	2796
cac aaa ggg atg ggt gac acc tat tca gag gtg tct gag aac agt gag His Lys Gly Met Gly Asp Thr Tyr Ser Glu Val Ser Glu Asn Ser Glu 913 918 923 928	2844
tcg tgg gag ccc cgt gtc cct gag gcc agc tca gag ccc ttt gac aca Ser Trp Glu Pro Arg Val Pro Glu Ala Ser Ser Glu Pro Phe Asp Thr 939 934 939	2892
tcg agt ccc cag gct gga cgt cag ctc gaa aca gac tga atttgatctg Ser Ser Pro Gln Ala Gly Arg Gln Leu Glu Thr Asp * 945 950	2941
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gaateetege agacageeea gageetgeeg etaceetegg eetgeeeace accaageaag	3121







<sup>&</sup>lt;210> 145

<sup>&</sup>lt;211> 4824

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

<sup>&</sup>lt;221> CDS

<sup>&</sup>lt;222> (377)..(1576)

<220>
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									,								
	at: 110	e Gl	c ta y Ty	c at r Il	c ta e Ty	t gc r Al 16	a Le	t ct u Le	t ttt u Phe	t gto	c aat l Ası 160	а Ьу	g aa s As	c tt n Ph	t gg e Gl	a gtg y Val 171	
	gaa Glu 172	л Гу:	g at s Il	t cc e Pr	t ca o Gl:	a ag n Se: 17'	r His	c att	t cag e Glr	g caq n Glr	g att n Ile 182	Э Су	t ga s Gl	a ac u Th	a at r Il	t tta e Leu 187	937
	aco Thi 188	: Sei	Gl;	a ga y Gl	a aad u Asi	c cta n Lei 19:	ı Ala	agg Arg	g aag g Lys	g aga B Arc	a aac g Asn 198	ı Phe	c ac	g gc r Al	a aa a Ly	g tct s Ser 203	985
	cca Pro 204	) Let	g ate	g tat	t gaa r Gli	a tgg ı Tr <u>p</u> 209	Tyr	caç Glr	g gaa 1 Glu	tat Tyr	tat Tyr 214	Va]	a ggg	g gc: y Ala	t gc	t cat a His 219	1033
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	aat Asn 268	cga Arg	gat Asp	ctg Leu	ctt Leu	gtc Val 273	cat His	tgg Trp	tgc Cys	cat His	ggc Gly 278	gcc Ala	cct Pro	gly aaa	gta Val	atc Ile 283	1225
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•	tgt Cys 300	gat Asp	gcc Ala	tat Tyr	cag Gln	tgt Cys 305	gct Ala	gat Asp	gtg Val	atc Ile	tgg Trp 310	caa Gln	tat Tyr	61 <sup>3</sup>	ttg Leu	ctg Leu 315	1321
_	aag Lys 316	aag Lys	gga Gly	tat Tyr	Gly aaa	ctg Leu 321	tgc Cys	cac His	ggt Gly	tct Ser	gca Ala 326	gjà aaa	aat Asn	gcc Ala	tat Tyr	gcc Ala 331	1369
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Ŀ	gcc Ala 848	tgt Cys	aag Lys	ttt Phe	gct Ala	gaa Glu 353	tgg Trp	tgc Cys	tta Leu	Glu	tat Tyr 358	gga Gly	gaa Glu	cat His	gga Gly	tgc Cys 363	1465
P	iga Arg 164	aca Thr	cca Pro	gac Asp	acc Thr	cct Pro 369	ttc Phe	tct Ser	ctc Leu	Phe	gaa Glu 374	gga Gly	atg Met	gct Ala	gga Gly	aca Thr 379	1513

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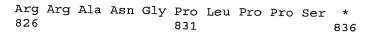
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Ser Arg Arg Arg His Gly Arg Arg Ser His Gln Gln Asn Pro Trp Phe
8 13 18 23

aga ctc cgt gat tct gaa gac agg tct gac tcc cgg gca gca cag ccc

329

Ar <u>o</u> 24	l J Le	u Ar	g As	p Se:	r Gl	u As <sub>]</sub> 9	p Ar	g Se:	r As	p Se:		g Al	a Al	a Gl	n Pro 39	
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PI	a ga o Gl 4	ig ag .u Ai	ga t g C	gt a ys A	ac sn :	ttc Phe 29	Th:	c ct r Le	g gc u Al	g g a G	gag 31u	tco Ser 34	: Ly	g go	cc t la s	ccc Ser	ag Se:	r Hi	at Ls 39	147
Se	t gt r Va 0	g to l Se	t at	ic c	ag i	gg Trp 45	aga Arg	a at g Il	t tt e Le	g g u G	lgc	tca Ser 50	Pr	c to o Cy	jt a 7s A	ac Sn	tt: Ph	∍ S∈	jc er 55	195
ct Le 5	c at u Il 6	c ta e Ty	t ag r Se	jc aq er Se	gt g er <i>I</i>	sp 61	acc Thr	c ct <sub>i</sub>	9 999 u Gl <sub>j</sub>	y A	ccla	gcg Ala 66	. Le	g tg u Cy	c c	ct	aco Thi	: Ph	t le 1	243
cg Arg	g ata g Ilo 2	a ga e As	c aa p As	c ac n Th	c a ir T	ca hr 77	tac Tyr	. GJ <sup>2</sup> . aa:	a tgt / Cys	t a s A	ac sn	ctt Leu 82	Glr	a ga n As	t t p L	ta eu	caa Gln	gc Al 8	a	291
88 GJ <sup>7</sup> āds	a aco 7 Thi 3	c at	c ta e Ty	t aa r As	c t	tc he 93	aag Lys	att Ile	att Ile	t to	ct er	ctg Leu 98	gat Asp	ga Gl	ag uG	ag lu	aga Arg	ac Th 10	r	339
gtg Val 104	g gto L Val	tt: Le:	g ca ı Gl	a ac n Th	rA	at sp 09	cct Pro	tta Leu	cct Pro	C C Pı	ro	gct Ala 114	agg Arg	tti Phe	t gg	ga ly	gtc Val	ag Se:	r	387
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	tc: Se: 1368	r Th	g gc r Al	c at a Il	t gc	c tg a Cys 1373	s Sei	tgg Tr	g ato	c cc	t cct DPro 1378	) Asp	tct Sei	gad Asp	c ttt p Phe	gat Asp 1383	4179
	ggt Gl <sub>3</sub> 1384	i Tai	ag Se:	t ati	t gaa e Gli	a tgo u Cys 1389	a Arc	g aaa g Lys	at <u>c</u> Met	g gad : Asi	c acc Thr 1394	Glr	ı gaa ı Glı	a gtt 1 Val	gag L Glu	ttt Phe 1399	4227
	tco Ser 1400	: Arg	a aaq J Ly:	g cto s Lei	g gag ı Glı	g aaa 1 Lys 1405	: Glu	aaa Lys	tct Ser	t cto	g ctc 1 Leu 1410	Asn	ato Ile	ato Met	g atg : Met	cta Leu 1415	4275
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	atg Met 1432	Thr	ago Ser	gag Glu	gtg Val	gtt Val 1437	Glu	gac Asp	agc Ser	act Thr	atc Ile 1442	aca Thr	atg Met	ata Ile	Asp	cgc Arg 1447	4371
	ccc Pro 1448	cct Pro	cct	cca Pro	ccc Pro	cca Pro 1453	cac His	att Ile	cgt Arg	Val	aat Asn 1458	gaa Glu	aag Lys	gat Asp	Val	cta Leu 1463	4419
Same there forth word	11e 1464	ser	гÀв	Ser	Ser	Ile 1469	Asn	Phe	Thr	Val	aac Asn 1474	Cys	Ser	Trp	Phe :	Ser 1479	4467
Harry III Wall	gac Asp 1480	acc Thr	aat Asn	gga Gly	Ala	gtg Val 1485	aaa Lys	tac Tyr	ttc Phe	Thr	gtg Val 1490	gtg Val	gtg Val	aga Arg	Glu	gct Ala 1495	4515
	1496	GIĀ	ser	Asp	G1u	Leu 1501	Lys	Pro	Glu	Gln	cag Gln 1506	His	Pro	Leu	Pro	Ser .511	4563
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	1560	Pro	Thr	GIN	GIn 1	Lys 565	Phe	Cys .	Asp (	Gly 1	570	Leu :	Lys	Pro	His 1	Thr 575	4755
	gcc Ala 1576	tac Tyr	aga Arg	atc Ile	Ser	att Ile 581	cga : Arg :	gct Ala :	ttt a Phe '	Thr	cag Gln : 586	ctc Leu 1	ttt Phe	gat Asp	Glu i	gac Asp 591	4803

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And Han	999 Gly 1672	GII	aaa Lys	ı ggt s Gly	aac Asn	cgg Arg 1677	aaa Lys	act Thr	tct Ser	tgt Cys	cca Pro 1682	Ile	aaa Lys	ata Ile	aat Asr	cag Gln 1687	5091
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and the man the	tcc Ser 1704	aag Lys	gaa Glu	tac Tyr	GLu	gag Glu 1709	tta Leu	aaa Lys	gac Asp	Val	ggc Gly 1714	cga Arg	aac Asn	cag Gln	Ser	tgt Cys 1719	5187
	gac Asp 1720	att Ile	gca Ala	ctc Leu	Leu	ccg Pro 1725	gag Glu	aat Asn	aga Arg	Gly	aaa Lys 1730	aat Asn	cga Arg	tac Tyr	Asn	aat Asn 1735	5235
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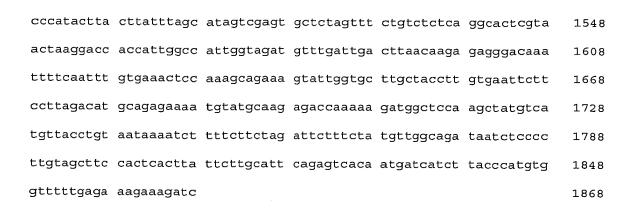
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deren Species	ggt Gly 1896	gct Ala	glà aaa	ccc Pro	Thr	gtg Val 1901	gtg Val	cac His	tgc Cys	Ser	gct Ala 1906	ggt Gly	gtg Val	ggt Gly	Arg	act Thr 1911	5763
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	ccc Pro 1976	ttg Leu	ttt Phe	cca ( Pro	тте .	tat ( Tyr ( 981	gaa a Glu A	Asn `	gtg Val	Asn	Pro (	gag Glu '	tat Tyr :	cac His	Arg	gat Asp 991	6003
	cca Pro 1992	gtc Val '	tat Tyr	tca a Ser A	Arg 1	cat ( His 997	ga g *	ga at	tgta	cctg	a aga	agct	cctg	gat	aaaa	att	6056
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att Ile 89	ttc Phe	gac Asp	aca Thr	gag Glu	gtg Val 94	ccc Pro	aat Asn	gct Ala	gaa Glu	acg Thr 99	tcc Ser	aag Lys	gag Glu	att Ile	att Ile 104	760
cgc Arg	tgc Cys	att Ile	ctt Leu	ctg Leu	acc Thr	tcc Ser	cca Pro	Gly aaa	cct Pro	cat His	gct Ala	ctg Leu	ctt Leu	ctg Leu	gtg Val	808

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agg gaa go Arg Glu Al 169	ct cca gaa la Pro Glu	gac att Asp Ile 174	caa gac Gln Asp	ttg atg Leu Met 179	g gac att t : Asp Ile P :	ne Gly A	ac 1000 sp 84
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atc cag aa Ile Gln Ly 233	g caa aca s Gln Thr	caa gca a Gln Ala M 238	atg caa q Met Gln (	gaa ctc Glu Leu 243	cac aga gt His Arg Va	g gag ct 1 Glu Le 24	eu
gag aga ga Glu Arg Gl 249	g aaa gcg u Lys Ala	cgg ata a Arg Ile A 254	aga gag q Arg Glu (	gag tat Glu Tyr 259	gaa gag aa Glu Glu Ly	a atc ag s Ile Ar 26	<sup>†</sup> g
aag ctg ga Lys Leu Gl <sup>.</sup> 265	a gat aaa u Asp Lys	gtg gag o Val Glu 0 270	cag gaa a Gln Glu I	aag aga Lys Arg 275	aag aag ca Lys Lys Gl	a atg ga n Met Gl 28	u
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gca aga acq Ala Arg Thi 297	g gaa gtg r Glu Val	gag agt a Glu Ser L 302	ag gat g ys Asp G	ggg ata Sly Ile 307	ctt gaa tt Leu Glu Le	a atc at u Ile Me 31	t
aca gcg tta Thr Ala Let 313	ı Gln Ile	gct tcc t Ala Ser P 318	tt att t he Ile L	tg tta eu Leu 323	cgt ctg tt Arg Leu Ph	c gcg ga e Ala Gl 32	u
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480

528

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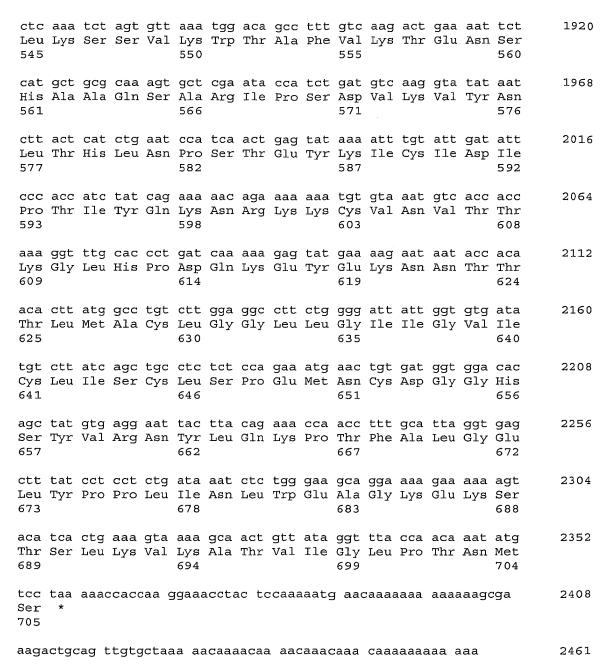
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											att Ile 107						576
											aac Asn 123						624
		-		_	_				_		tta Leu 139		_				672
				_							gga Gly 155	_					720
40 mg					_						aat Asn 171	_			_		768
des the sec		-	_			_	_				cta Leu 187				_		816
		-					-			_	atg Met 203			_			864
dina hadi											ata Ile 219						912
		_		_	_	-		_	_		tta Leu 235		-				960
						Ile	Lys	_	Pro	His	gtt Val 251	-				_	1008
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			_					_	-		aac Asn			_	_		1200

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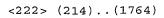
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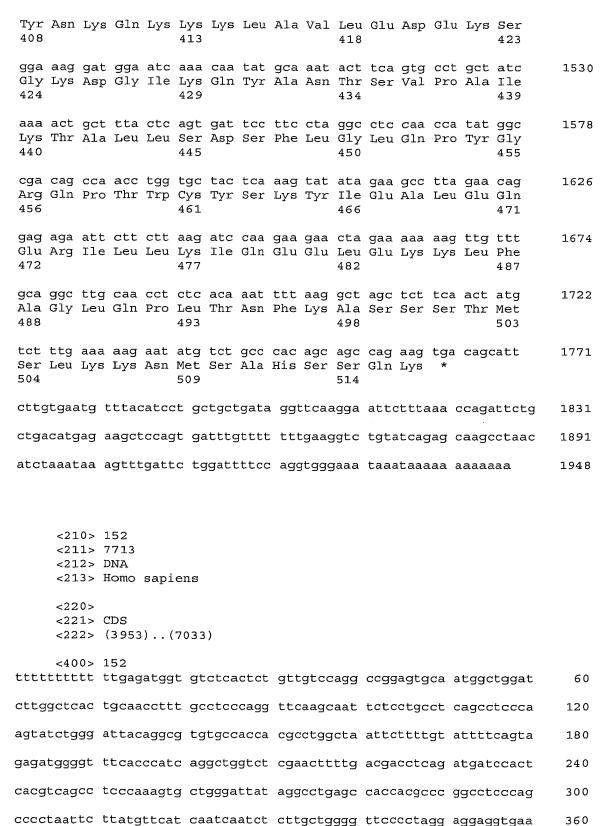
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aag ttt agt gat ctg ctt aac aac aaa ctg gag ttt gaa cat ttc cgt Lys Phe Ser Asp Leu Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg 104 109 114 119	570
cag ttt ctt gag act cat tct tca agc atg gat ctt atg tgc tgg aca Gln Phe Leu Glu Thr His Ser Ser Ser Met Asp Leu Met Cys Trp Thr 120 125 130 135	618
gac att gag cag ttc cgg aga ata act tac aga gat cga aat caa agg Asp Ile Glu Gln Phe Arg Arg Ile Thr Tyr Arg Asp Arg Asn Gln Arg 136 141 146 151	666
aag gca aaa tct ata tac att aaa aac aaa tac ctt aat aa	714
ttc ttt gga ccc aac agt cca gct tct ctg tat cag cag aac cag gta Phe Phe Gly Pro Asn Ser Pro Ala Ser Leu Tyr Gln Gln Asn Gln Val 168 173 178 183	762

atg Met 184	His	tta Leu	agt Ser	ggt	ggc Gly 189	Trp	gly aaa	aag Lys	att Ile	ctt Leu 194	. His	gag Glu	cag Gln	ctt Leu	gat Asp 199	810
gca Ala 200	Pro	gtt Val	cta Leu	gtt Val	gaa Glu 205	atc Ile	cag Gln	aag Lys	cat His	gtg Val 210	Gln	. aat . Asn	agg Arg	cta Leu	gaa Glu 215	858
aat Asn 216	Val	tgg Trp	ctg Leu	cca Pro	ttg Leu 221	ttt Phe	ctt Leu	gca Ala	agt Ser	gaa Glu 226	Gln	ttt Phe	gca Ala	gca Ala	cgt Arg 231	906
			aag Lys													954
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tgg Trp 264	atc Ile	tct Ser	tca Ser	tct Ser	tgt Cys 269	aaa Lys	atc Ile	att Ile	gct Ala	ttt Phe 274	cgc Arg	aaa Lys	gca Ala	tta Leu	ttg Leu 279	1050
aat Asn 280	cca Pro	gtt Val	act Thr	tca Ser	aga Arg 285	caa Gln	ttt Phe	caa Gln	cgt Arg	ttt Phe 290	gtg Val	gct Ala	cta Leu	aaa Lys	gga Gly 295	1098
gat Asp 296	tta Leu	ttg Leu	gaa Glu	aat Asn	ggt Gly 301	tta Leu	ctc Leu	ttt Phe	tgg Trp	caa Gln 306	gaa Glu	gta Val	caa Gln	aaa Lys	tat Tyr 311	1146
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cgg Arg 360	aag Lys	gag Glu	tta Leu	gga Gly	cca Pro 365	tat Tyr	gta Val	ttt Phe	aga Arg	gag Glu 370	gca Ala	cag Gln	atg Met	aca Thr	att Ile 375	1338
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aat Asn 392	tta Leu	aca Thr	gat Asp	gaa Glu	aat Asn 397	att Ile	atg Met	agt Ser	gtt Val	tta Leu 402	gag Glu	aga Arg	aga Arg	caa Gln	gaa Glu 407	1434
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ctg Leu 18	cat His	ggc	ggc	ggc	agc Ser 23	ctc Leu	cac His	tac Tyr	gcg Ala	cta Leu 28	gcc Ala	cga Arg	aag Lys	ggt Gly	ggc 33	4051
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-			-		gac Asp 215	_	_	_	~		_		_	-		4627
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		_		_	ggc Gly 247			_		_		_	_	_	_	4723
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					atg Met 311											4915
					gcc Ala 327											4963
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Ile 418	Pro	Phe	Ser	Leu	Pro 423	Glu	Gly	Leu	Pro	Lys 428	Ile	Pro	Ser	Val	Ser 433	
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-	_	-		aag Lys				_	_		_	-				5491
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				tcc Ser												5683
	Lys			gag Glu		Ala	_	Ser	Pro	_	Lys	_			_	5731
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act Thr 510	gag Glu	gcc Ala	acc Thr	cgg Arg	agc Ser 515	tat Tyr	gtg Val	gtg Val	ctc Leu	agc Ser 520	tgg Trp	aag Lys	ccc Pro	cct Pro	ggc Gly 525	2244
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acg Thr 590	gag Glu	gtg Val	act Thr	gtg Val	gta Val 595	gl <sup>à</sup> aaa	gac Asp	aaa Lys	ctt Leu	gat Asp 600	atc Ile	ccc Pro	aag Lys	gct Ala	cct Pro 605	2484
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									gca Ala							3060
									gga Gly							3108
									gtt Val							3156
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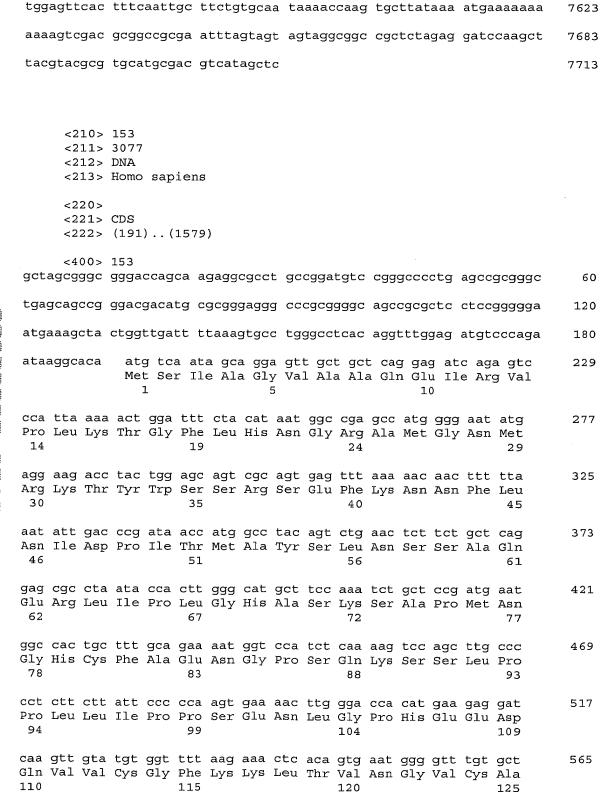
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77 47 17 17 17 17 17 17 17 17 17 17 17 17 17					aaa Lys 1					Ala					Leu		4404
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					atg Met 1					Gly					Gln		4596
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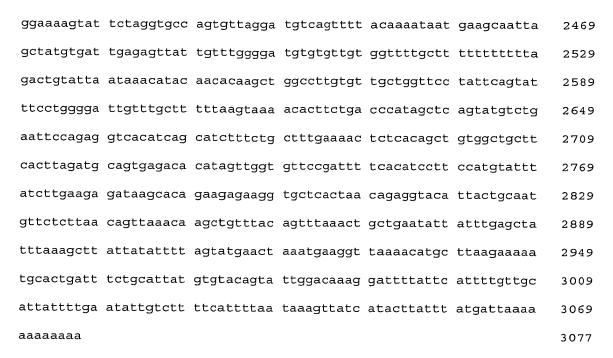
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gaa Glu 946																6835
gac Asp 962		_			_	-	-	-								6883
gag Glu 978																6931
aag Lys 994									Ser					Gln		6979
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	_	_			aac Asn 275		-	_	_				_			1045
-	_				cct Pro 291	_		_	_		_		_	_		1093
					tcg Ser 307											1141
	-	_			gaa Glu 323		_		_	_		_	_		_	1189
_			_		ccg Pro 339						_	_		_		1237
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Gln Ser Phe Ala Pro Asp Pro Lys Tyr Val Ser Ser Lys Ala Leu Gln 350 355 360 365	
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